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ABSTRACT

National conferences on population and development have recommended the integration of population issues into development planning by national governments. This book presents several ideas of practitioners in the field of population and family life education. Five articles in Part I focus on solutions to problems of introducing population education into school programs. Population education as a "foreign" concept in Africa must be overcome for effective education to occur. The problems of personnel training, using innovative educational procedures, and the technologies of population education are discussed. Part II deals with the progress made in various African countries. In Sierra Leone, a curriculum in population education was integrated with social studies in secondary schools and secondary teacher colleges. Since the introduction of family life programs in the Republic of Seychelles, the rate of teenage pregnancies has decreased and venereal diseases are more controlled. The National Programme of Population Education in Somalia is now in its fourth year. The school programme is a resource unit for other agencies concerned with population education. The population program in Nigeria attempts to ensure inclusion of population concepts into secondary education curricula and textbooks. Programs available to individual countries from UNESCO and a summary of each country's programs are provided. Part III presents three sets of recommendations for development of population education programs in sub-Saharan Africa. (SM)

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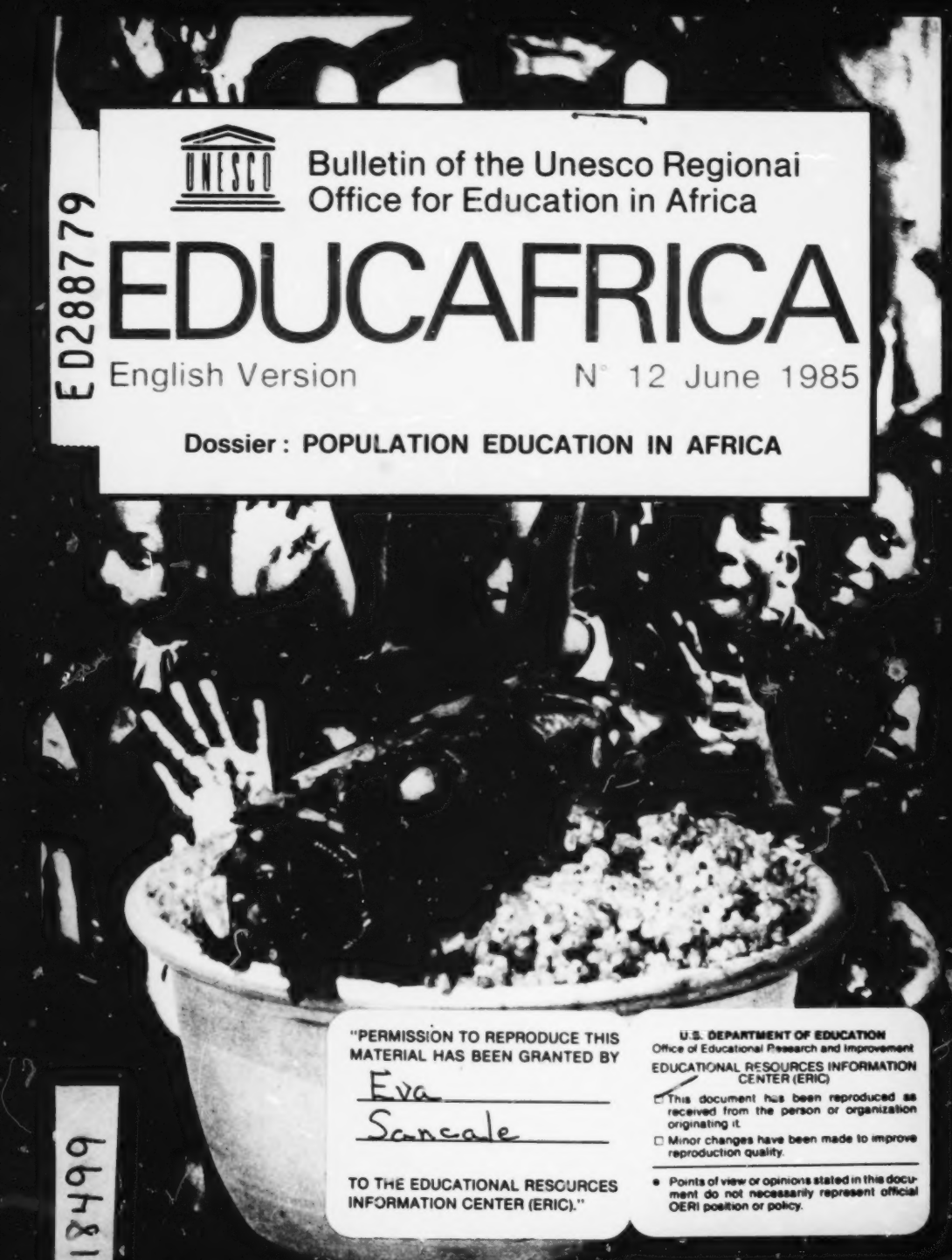

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CORRIGENDA

P. 7, line 10, read «rational» (not «national»)

P. 12, line 29, read «are» (not «owe»)

P. 23, line 15, read «as is» (not «as in»)

P. 112, line 9, read «morality» (not «mortality»)

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INTRODUCTION*

Beginning from the 1970s, various national, sub-regional, regional and interregional conferences held on the theme of population and development have recommended the integration of population factors into development planning by national governments. One of the strategies frequently suggested to achieve this end is the systematic introduction of population and family life education programme into the education systems of developing countries. The objectives of this type of education are not only to create awareness and understanding among learners of the linkages between population factors and people's standards of living and quality of life, but also to encourage national decision-making and actions in ways that are personally meaningful and socially desirable.

Education being viewed as a life-long process, the learners in this context may be young or old, males or females, in or out-of-school.

This issue presents a number of ideas from the practitioners in the field of population and family life education concerning suitable approaches for developing population education programmes to make them respond positively to the needs of developing countries, particularly in Africa. It also presents country, regional and Agency-level field experiences to show comparatively the dimensions of the field as well as the strengths and weaknesses of the techniques adopted in implementing the programmes.

The articles are presented in three parts. The Part I provides the background knowledge on programme planning, development and pedagogy. It contains five papers.

The article by *F. Hane Ba* argues the case that population education is not new: it has a traditional basis, philosophy and techniques. *J. Casassus'* paper outlines the strategies for effecting an innovative curriculum development through population education. The article by *A. Ukaegbu* highlights the priority of training for national personnel in the field of population education. It identifies the needs, approaches, target groups, techniques, content and the facilitative role of institutions of higher education and the international agencies in the training process.

In their thought-provoking paper, *A. Krystall and T. Johnston* challenge the primacy traditionally accorded to textbooks in population education. They urge the efficacy of substitute technologies (visual and audio-visual media) which, they argue, have high capacity to stimulate visualization, imagination and comprehension, thereby increasing understanding and affective change.

* by Alfred UKAEGBU.

In the paper on teaching methodology, *A. Ukaegbu* provides illustrative sample lessons on the teaching of certain concepts in population education through the application of such techniques as the inquiry method, values clarification, and role playing. The emphasis here is that teachers must devise participatory teaching methods in order to make population education both interesting to the learners and truly renovative in methodology.

The Part II presents the experiences at the country, regional and agency levels. The data in this section show that there exists already a number of useful, different approaches in programme planning and development in sub-Saharan Africa and beyond. Thus, new programmes have the chance to learn from the existing and older programmes as well as take advantage of what the UN agencies can offer in this field.

The paper by *T. Lucan* describes the pioneering experience of Sierra Leone in introducing population education into a new field of social studies at the secondary and teachers' college levels. Similarly, *R. Pardiwalla*'s paper on Seychelles deals with how to overcome opposition in introducing population and family life concepts into the education system of a religious community. The paper of *A. Awale and T. Johnston* discusses the approaches and techniques adopted in introducing population education in both the in-and out-of-school settings in Somalia. Many examples of effective training strategies and instructional materials are provided. *F. Akinlaye*'s paper presents the broad-based participatory approach in programme development in Nigeria.

A. Ukaegbu and J. Kyazze introduce Unesco's field experience and the services available to country programmes from Unesco. The paper by *G. Garzon-Castaneda, H. Pour and A. Simbeye* describes the ILO field experiences and outlines what services the Organization can provide to country programmes. *W. Mlay* proposes a multi-sectoral rural training strategy for population education front-line workers in African rural communities – a reflection of the UN/FAO approach.

The article by *A. Taborga* provides a lucid example of the supportive role of population communication activities to population education programmes in Latin American countries.

This part completes with summaries of country-level activities in sub-Saharan Africa and involving Unesco technical assistance. The prospect is bright that many other countries in the region might adopt population education in the next few years.

The Part III introduced by *A. Ukaegbu* presents three sets of recommendations in recent years which have a direct relevance to the development of population education programmes in sub-Saharan Africa.

PART I

BACKGROUND KNOWLEDGE

Fama HANE BA*

POPULATION EDUCATION FOREIGN TO AFRICA?

The introduction of population education in developing countries and Africa in particular met with a lot of difficulties during the past decade. In fact, having started in these countries as information on the possible consequences of a high birth rate and a rapid demographic growth, population education ended up being regarded with distrust as a type of education that was apparently created out of nothing by Western countries concerned with what they described as the population explosion in the developing countries so as to limit their population.

Population education in Africa South of the Sahara made very little progress during the 70s and, even though some projects came to be implemented during that period, they were particularly concerned with resolving specific problems connected with the family or sexual life of young people. Since the beginning of the 1980s, however, more and more countries have been engaged in population education, though it must be noted that a number of them have still not drawn up a programme in this field. Presently, one of the main reasons is that several countries still continue to regard population education as a foreign concept to Africa.

Before going any further, however, it is perhaps necessary to recall the objective of population education which is: «to enable learners to acquire the knowledge, skills, attitudes and values necessary to make informed decisions about population events and issues which affect the present and future quality of life for themselves, their families, communities, societies and nations» (1). Thus defined, is population education foreign to Africa?

To answer this question, we shall examine the main characteristics of the traditional systems of education in Africa and the place that population issues occupied in this education. Then, we shall consider the relevance of the introduction of population education in the present educational systems.

* Regional Adviser in Population Education, BREDA.

(1) Population Education: A contemporary perspective, Paris, Unesco 1978, p.40.

THE MAIN CHARACTERISTICS OF THE TRADITIONAL SYSTEMS OF EDUCATION IN AFRICA

«L'éducation en Afrique Noire» by Abdou Moumouni (1964) and «L'enfant et son milieu en Afrique Noire : essai sur l'éducation traditionnelle» by Pierre Erny (1972) have so fully established the unity of the traditional systems of education on which we base our analysis that we do not need to go over it. We shall therefore limit ourselves here to highlighting the main characteristics of the said systems so as to permit a greater appreciation of the place and method of dealing with population issues in education.

In the first place, the object of traditional education is the global development of the population as a whole and this implies, on the one hand, that its content covers all aspects of life in society, namely economic, political, social, legal, health, cultural, spiritual and, on the other, that individual interest is subordinate to the collective interest.

This concept of education derives from a vision of the world which incorporates aspects of a cosmological, geological, biological, economic, political and psycho-sociological nature.

Man, according to the cosmogony of the majority of pre-Islamic socieites, was born somewhere in heaven and which is, at the same time, a place of reincarnation. He sojourns in this world to gather provisions for his journey and inescapably dies in order to reach the village of the dead where he will live an eternal life with his family and kinsmen (2). Some dead persons might return to earth through newly born children; as a result, ceremonies for determining the ancestor reincarnated by a newly born child still exist in some parts of Africa. Continuity therefore exists between life and death and this implies a philosophy of history concerning the finality and becoming of the population in time and a social philosophy concerning the community and not only the individual, such that «one must prefer a dignified life in the service of the community to which we owe infinitely indebted to having a long life» (3). Nonetheless, earthly life remains for man a tangible reality that must be cultivated at all levels, material as well as spiritual, for the welfare of the entire society acting as a single unit.

Education, in this regard, appears not only as a right but also and especially as a duty for every individual. In this sense also, it concerns all the members of the society and is dispensed throughout a man's life time.

(2) Institut national de recherche et de documentation de Guinée. *L'éducation à la vie familiale dans la société traditionnelle*. Dakar, BREDA/Unesco, 1982. (Etudes et recherches en éducation en matière de population), p. 5 – 8.
(3) Op.cit. p. 11.

Moreover, in so far as the behaviour of an individual may have disastrous consequences on the life of the entire community, education is everybody's concern. In fact, the violation of a moral injunction, such as adultery outside the village, may have political consequences by heaping discredit on the village, the community and the authorities and even disturb the established social order by causing such natural calamities as drought, famine and depopulation (4).

Regarding subjects for education, they can be classified into four main interdependent groups (5): first, life (its importance, the conditions of its perpetuation and continuity); then, the community, which emphasises its primacy over the individual, its immortality and the significance of its unity within the scope of a collective action and global development project; thirdly, the law, concerning the cosmic, socio-political and ethical orders; and finally, complementarity, which teaches that beyond the apparent differences and contradictions there is unity or, to be more precise, complementarity between the sexes, age groups, professions and the living and the dead.

The teaching method deriving from this education is a global, integrated and progressive method; and the education given to a child is a global education that embraces all aspects of social life. Besides, one fundamental feature of this education is that theory is inseparable from practice and apprenticeship assumes a vital importance in the educational process.

For example, though it is carried out as the child grows up, training in production is mainly conducted at the place of work. Education is given in various places and is essentially of an informal character. These places include the family, age group associations, work places, initiation circles, political and legal gatherings. It can nevertheless be given in any place whatsoever, including the street where each member of the community has the right and even the duty to chastise a younger person who violates an established code of conduct. Thus, educators may either be simple members of the community or specialists who generally work in rather formal settings (initiation circles, sacred forests). Like the places of education, there are various methods of education ranging from children's games to participation in different gatherings and stories, myths, cultural events, ceremonies, practical exercises, etc.

This, in short, is the context in which traditional education on population issues in Africa took place. Now we shall attempt to examine the ideological background, the role, content, method and teaching techniques of this system of education.

(4) Harris Memel Fote. *Education en matière de population: problèmes axiologiques et épistémologiques en Afrique*. Dakar, BREDA/Unesco, 1982. (Etudes et recherches en éducation en matière de population).

(5) Ibidem, p. 12–15.

Basic Ideology

The goal and significance of what would become of the population in the future occupy a very vital place in the philosophy of the history of traditional African societies.

For this reason, the importance of life, the eternity of being and the immortality of the community are constantly emphasised and put forward. The major concern of each family, clan, line of descendants or community thus remains its perpetuation and all economic, political, cultural, spiritual and ideological resources are directed to this end. That is why man appears as the greatest wealth as expressed among other things in the Wolof saying: «nit, nit ay garabam» (meaning «man is man's remedy»). In other words, man gains more from human relations than from a lot of material wealth.

At a higher level, the family or the community, this saying expresses the importance attached to a large family and considerable human resources. And though he came to earth later than the animals and mythical beings, man appears as the centre of the universe by virtue of his cognitive and creative ability (6).

In fact, within the framework of traditional peasant societies with a subsistence economy, a community becomes more prosperous and stronger as it disposes of more developed human resources. Here, developed human resources must be understood in both quantitative and qualitative terms (physical and mental health) since a large but sickly population cannot bring about the harmonious and total development of an entire community. The population thus appears mainly as a closed related and interdependent set of procreative, productive and defensive forces. The application of such a concept of the world and people makes full use of all aspects of the life of the community (political, social, cultural, spiritual).

In short, all social life is organised around a solid populationist ideology as witnessed, for instance, by the cults connected with fertility, especially in animistic societies, the symbols employed in some Islamic societies when the hand of a girl is being requested for marriage by identifying her with a seed (7), the exaltation of the procreative ability and the social function attaching to it, as well as the shamefulness of sterility and celibacy. One can thus say that the population is one of the major concerns of traditional societies and hence of educa-

(6) Tempels, R. *La philosophie bantoue*. Présence Africaine, Paris, 1949.
(7) Oumar Kane. *Les fondements culturels de l'éducation en matière de population dans l'aire sénégambienne*. Dakar, BREDA/Unesco, 1982 (Etudes et recherches en éducation en matière de population).

tion and that the ideology on which this education was based is populationist and perfectly corresponded with the then prevailing socio-economic conditions.

But if the natural movement of people was subject to control or rather to a very strict supervision, population movements in the form of migration did not reach alarming proportions. In fact, the security felt through communal solidarity and the small size of the population practically precluded the voluntary migration of individuals or families, such that population movements mainly involved group migrations resulting from wars or natural disasters or as an expression of a way of life (Fula nomads) because belonging to a kindred group implies having to accomplish all one's life within the clan, that is from residence to marriage and eternal rest (8).

Method

The method of teaching population issues is an integrated method since in the first place, the approach to education as we have already seen, is global and education on population questions is inseparable from the other types of education. In this respect, there are no specific structures for this type of education and the content is always taught in relation to the other aspects of the education. In the second place, theory is inseparable from practice which as a matter of fact takes precedence over the former. Finally, this type of education, like the others, is given progressively throughout one's life time: the level of knowledge taught and the required social practice correspond with the functions pertaining to the different age groups from birth to old age. We shall later see that on account of its essentially informal nature, this education is somewhat centered on the individual.

Content and Structures

Though education on population issues is not given outside the global educational framework, we shall try to draw from this education the issues relating to population matters. Moreover, for reasons of analytical convenience and in order to have a better grasp of the adaptation of the structures to the subjects taught, we shall deal with these two aspects simultaneously. Matters relating to population are progressively inculcated in the child as its process of socialisation progresses; comencing from birth within the family, the process continues up to adulthood in political and legal gatherings by passing through age group associations and initiation circles.

(8) B. Ly. The Situation of the Child in the African World. *Educafrica* (Dakar, BREDA/Unesco), Special issue, 1979, p. 9–26.

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Within the Family

Family in this context does not mean nuclear but the extended family, which is a cultural reality and constitutes, in fact, the basic unit of the society.

Education in the family is conducted at two levels: through the intervention of parents (in the broadest sense of the word) and within the scope of games.

During early childhood, the family makes the children aware of sexual differences, recommends specific attitudes to each sex (e.g. a female child is taught how to sit and forbidden certain postures) and sees to the enforcement of certain behaviour the child is under constant observation and is reproached without being given any explanations. It is true for any conduct that does not conform with the social standards. It is also within the family that apprenticeship for the respective roles of men and women are commenced. Thus, from a very early age (5–7) girls help the women in their daily chores whilst the boys do the same with the men. Even though the family plays a very central role at this stage, it must also be pointed out that any member of the clan and even of the community may and do intervene generally in the education of children other than their own. In this way, the child is under constant guidance and surveillance wherever it may be in the community.

In the family, children are taught such values as modesty, the importance of the child which is considered as the basic wealth, the necessary discretion to observe in love relationships, the purpose of marriage, which is procreation, and the social norms relating to marriage (need to marry within the caste where the system exists, secondary importance of love in marriage vis a vis the reinforcement of links between descendants, etc.). At this first stage, games also assume great importance in that through observations of the social milieu the children mime the prevailing social practices during games: marriage, motherhood, naming ceremonies, care for the sick, etc. Stories and legends are also other excellent vehicles of education.

Age Group Associations

The second stage of education on population questions goes on in age group associations which are a form of social organization based on age and are common to practically all African societies. Such associations play a vital role in the socialisation process of the child. In fact, as models of the society, they comprise all social classes and ranks and enable the integration of an individual into a generation group whose position, rights and duties are clearly defined (9). In an

(9) Boubacar Ly, op. cit. p. 14.

age group association, a child broadens its social relations by transcending the family, finds its place in society at large and participates in its life. Age group associations may have economic, political, military and religious functions; their members include persons of the same sex and each male association has a corresponding female association, though generally younger, at least in Senegambian societies (10).

Relationships exist between corresponding age group associations but for purposes of this study only two types of relationships will be highlighted. Firstly, in each age group of the two sexes, one learns to know better and to care for one's body (preparation for circumcision by some manipulations done on the penis and preparation for the appearance of the menstrual cyle). This is mainly done with the assistance of elders.

The second aspect relates to learning about the relations between the sexes excluding sexual intercourse in general as shown in this example taken from Senegambian societies. During cultural activities organised in the village, young boys and girls of corresponding age groups consort with each other. In the Fula speaking society of Futa Toro in Senegal, each boy has a girl friend in the corresponding age group association. Under certain circumstances, he may request his girl friend to come and chat with him (yew teere). They may thus spend most of the night together (in galant conversation, riddles and, eventually flirtation) but all this is done in absolute chastity. Since premarital sex is prohibited and virginity is of inestimable value to the girl. In a way, the boy is the guarantor of his girld friend's chastity and should educate her so that she will not fall into temptation. He draws as much glory as the girl from her virginity when it is established on the day of her marriage. He is therefore content for the moment with a purely platonic love and the young girl's promise to be his mistress once she is married (11).

The end of adolescence and the passage to adulthood is marked by initiation ceremonies, a fundamental stage in the life of young people of both sexes.

Initiation Centres

Initiation is a form of systematising all the ideas inculcated in children from early childhood in the form of a global training organised by specialists at the end of adolescence for both boys and girls. It thus marks their entry into the community of adults and is not only limited to circumcision and excision and the preparation for sexual

(10) Oumar Kane, op. cit.
(11) Oumar Kane, op. cit.

life; rather, it represents a global training, including sexual education, preparation for marriage (respective roles), production, theology, nature study through knowledge of the natural environment, animals, and plants, as well as their uses (botanical, medicinal, pharmacological), history, culture, philosophy, (traditional principles and values of the society), and politics (more formal knowledge of the social system and its mode of operation, its laws, etc). The spirit of solidarity and the need for self-reliance (the group produced for its own subsistence) are also developed during this period.

The period of initiation varies from one tribe to another and may last for anything up to seven years. It generally brings together in one place young people of the same group. Such gatherings may be organised near the village but are held more often in a sacred bush as with the Lomagi and Naou of Guinea, the Senoufo of Mali and the Ivory Coast, the Jola of Senegal etc.

Boys and girls are initiated by turns. These centres do not operate permanently but are created periodically. It must be noted that the duration of initiation ceremonies has been progressively reducing over the years and even tend to disappear in some areas (north of Senegal, for instance). Circumcision for boys and excision for girls constitute the starting point of their initiation and preparation for sexual and family life. The origin of circumcision might have had something to do with hygiene and preventive defence against veneral diseases, but also with the need to remove the ambiguity in traditional cosmogony (the foreskin represents the female element in man and in the clitoris the male element in woman). The need to superintend the sexuality of women in particular only came to be added later, but too many cultural beliefs make it difficult to directly combat the practice of female excision. Then, for boys, it was a matter of preparing them in all respects to build a home, imbue them with the need to perpetuate the line of descendants and the sense of respect and gratitude due to women as any violence and offensive language against her will result in a heavy penalty on the offender of whatever rank he may be (12).

For the girls, the subjects taught included practical knowledge in cleanliness during menstruation, the posture to adopt during first sexual experience so as to avoid a brutal rupture of the hymen, aphrodisiac recipes for the husband, recognition of the signs of pregnancy, etc. The curriculum further provided training on availability for sexual intercourse, how to establish peace and concord in marriage and in the family, concern for motherhood (including how to make the husband fulfill his conjugal duties), recommended bearing and dressing as well as the forbidden actions during the period of pregnancy.

(12) INDRC op. cit. p.20.

At the end of the initiation period, boys and girls are prepared to enter adult life and assume their respective roles within the family and society. However, education does not stop there; it continues in village gatherings and, regarding sexuality and family life, during the settlement of social disputes relating to such issues.

In conclusion, one can affirm that far from being foreign to Africa, population education is a part of the daily life of traditional African societies where it was incorporated into a coherent project for the development of the society. The population policy underlying this education and involving all aspects of life is supportive of the growth of the birth rate and the whole system had such internal coherence that there was hardly any social misfits; virtually no suicides, homicides, abortions and mental cases occurred in general (13).

Besides, population education is still a living reality in the rural areas of Africa (where about 70% of the population live today) and, to a less extent, in slum areas of towns and cities as revealed by the socio-cultural studies on family planning education published in 1982 by BREDA.

THE STATUS OF POPULATION EDUCATION

If traditional population education in population issues is still a living practice, why is it necessary today to promote it in the educational system? This is the question we will try to answer by examining the status of population education in the present educational systems.

Firstly, this education is losing more and more its importance in the present context of the development of African societies. The penetration of the market economy into the countryside has led to a partial destruction of the traditional social structures (which is worsened by the rural depopulation). Moreover, the growth of school attendance has uprooted the child from its family circle for practically the whole day, such that the educational guidance of the family and the community especially with regard to sexual and family life has been severely limited.

For example, initiation, which used to be a real training for life, has seen its duration progressively reduced by the force of circumstances. At the same time, it has been emptied of its original meaning and reduced to a simple act of circumcision which, besides, is now being increasingly performed in health centres.

Similarly, the development strategies executed to date by the African countries have failed to come out with a new philosophy of development based on the new context and embracing ideology, eco-

(13) Harris Memel Fote, op. cit.

nomy, politics, culture and ethics. In this sense, the present educational systems whose curricula are ill-adapted to the social milieu, are incapable of substituting the role that the family and community used to play in the education of children.

On the contrary, they transmit imported concepts often in contradiction with the social ideas and values pertaining to the milieu. If, however, traditional population education is becoming more and more run down, the underlying ideology of promoting births still remains deeply imbedded in the minds of people and determines their behaviour. This is true not only in rural areas but also in urban centers where it is all the more striking as living conditions are more difficult there than in rural areas and access to family planning services is easier(14).

Far from providing a coherent and balanced programme, the development policies adopted ended in a greater impoverishment of the rural masses and a misuse of the available human potential and resources. This finds expression in under-employment in rural areas and unemployment in towns and cities.

At the same time the development of health services and the combat against endemic diseases resulted in a reduction of the death rate, the infant death rate in particular, though the two still remain high. A high population growth rate followed from this which, coupled with the massive rural depopulation and its corollary, rapid urbanisation, further worsen the economic and social problems of the countries.

Consequently, African countries are confronted with more serious difficulties regarding the democratisation of learning (the average school attendance rate in Africa is estimated at 69.1% in 1985 whilst the Conference of Ministers of Education held in Addis Ababa in 1961 had set the objective of universal primary education in 1980), employment (unemployment due both to inadequate creation of jobs and imbalance between training and the needs of the economy), and provision of social services (health, housing) for the population.

Faced with these problems, the tendency for some Governments has been to adopt Malthusian population policies that are contrary to the aspirations of the people and which led to the failure of some family planning campaigns. It must also be noted that these policies do not proceed from a thorough analysis of the relationship between

(14) Cf. a) Olusanya P.O. The educational factor in human fertility: A case study of the residents of a suburban area in Ibadan. *The Nigerian Journal of Economic and Social studies*, (Lagos), vol. IX, no.3, November 1967, p. 351–374.

b) Lewis Barbara C. *Etude sur la fécondité, l'emploi et le statut de la femme en ville*, Abidjan, Ministère du Plan (République de la Côte d'Ivoire), janvier 1975.

population dynamics and the perspectives of economic development not only in the short term but in the medium and long terms as well.

In this context, it is urgent to work out coherent development policies corresponding with the present level of development of the societies and embracing all aspects: ideology, economics, politics, environment, culture, and ethics. In short, it is a matter of finding a new balance corresponding with the present conditions. In this connection, the introduction of a new type of population education in the educational systems and which would be an answer to the present educational problems seems to be entirely pertinent and appears as a pressing need.

Juan CASASSUS*

INNOVATORY ASPECTS OF POPULATION EDUCATION

INTRODUCTION

The importance attached to population issues and to the relationship between population and national development have prompted educational authorities in several countries to come to consider these issues as a source of relevant content for their educational programmes. The expansion of population education activities in the last 10 years has led some authors to consider it as one of the most rapidly growing educational innovations in the world. In fact, about one hundred countries find themselves at different stages in the implementation of this innovation.

That population education has emerged over a short period of time and has known such rapid expansion has led to synchronic situations where countries have had to develop contents and methods almost simultaneously. They have, therefore, been largely developed as an endogenous effort, without being able to benefit from the experience of fully developed programmes as in the case with other innovations.

One interesting feature of this situation is that since most of these programmes are being conducted in the developing world, most of the knowledge that is being actually produced in population education is drawn from the experience of third world countries. In this respect, and perhaps more than in other innovations, population education creates the basis and calls for the horizontal technical cooperation among developing countries.

This paper will consider some of the most significant innovative aspects that can be drawn from the experience of different countries in the implementation of population education in the formal school system.

EDUCATIONAL INNOVATION

In the field of education most specialists agree to consider innovations as being the result of a deliberate intent to adapt education to the changing requirements of the environment.

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In its simplest form, environment means the complex and dynamic social, economic, natural and cultural settings that constitute a given society. All contemporary societies, viewed as large systems, exert pressures on the educational system (a sub-system with respect to society as a whole) so that it can better assist in meeting the imperatives of the experience of development.

In addition to its role of ensuring the transmission of tradition and scientific knowledge, an additional role, that of facilitating change has been assigned to educational systems, which is one of preparing students for a type of society which has not yet come into being. An educational innovation should – ideally – facilitate changes that correspond to the perceived present and future needs of a society.

Innovations bring about changes in the existing educational system that have their own dynamics and constraints. An innovation therefore implies the modification of the established system through the introduction of different and/or better objectives and means that were previously not considered within it. Because of the inertia of systems in relatively stable settings, innovations are expected to confront initial resistance.

Three observations on innovation can be drawn from the above.

The first is that the concept of innovation is not an absolute concept. It is always relative to the particularities of a specific situation, thus the concept of innovation contains essentially the notion of relativity. An educational innovation is relative in several ways. It is relative to the society that expresses the need for it and from which it derives its meaning. It is relative to the educational system into which it will be introduced. It is relative in space, since what is innovatory in one context, may not be necessarily so if the context is different. It is also relative in time, that is to say that it will be an innovation only up to the moment of its institutionalization when it will cease to be innovatory.

The second observation is that innovations are introduced into systems – the larger system of society and the sub-system of education. Innovations are therefore subject to the constraints that govern the functioning of systems. A lack of understanding of this fact may lead to a marginalization of innovation and eventually prevent it from becoming institutionalized (1).

The third is that innovations are the result of deliberate action. Irrespective of eventual unforeseen developments which depend on the degree of control established during the planning stage, there is always a decision that lies at the origin of the innovation. Two elements are associated with decision – the place of origin and the scale affected by the decision. Innovations may originate in two places – at a central level of decision making, and tend to encompass the national level – and also at the periphery, covering only confined areas, nor-

mally referred to as innovations «from the base». Once successful peripherical innovations are assessed, they can subsequently be transferred to the central level. Because of the differences of scale covered by the innovations, the conditions for the conception and the management of information, feed-backs and expansion may vary considerably depending on whether they are centrally or peripherally decided innovations.

This leads us to another aspect. Educational innovations present two phases. The first represents the conception phase when the need is identified and the contents are determined. The second phase is the conduct of the innovation, which is the process through which the innovation is developed, evaluated, expanded and becomes institutionalized. In general, there is a chronological sequence between these phases. However, difficulties (such as mid-term evaluations or new information, for example, changes in population policy, coordination with other inputs) that may arise during the implementation of the second phase, frequently require a re-examination of the first phase and a restructuring of the whole process.

In the light of the above considerations, we shall now examine aspects of population education as an innovation.

POPULATION EDUCATION AS AN INNOVATION

Briefly stated, the innovatory character of population education expresses itself in that:

– The introduction of population contents into school programmes constitutes in itself an innovation;

– The teaching/learning of population contents requires methods that are usually considered innovatory; and

– The goals of population education trigger other changes in certain countries.

The Introduction of Population Contents

The introduction follows two distinct steps. The first refers to the set of decisions and actions related to educational objectives and contents. Decisions and actions are required in order to establish the general aims for the new content; to determine the selection and organization of the content, including their scope and sequence, that is to say, coverage and progression; to develop specific instructional objectives for each level; to determine the mode of inclusions of the content, which is subject to the constraints of the existing (and usually crowded) curriculum, and can take the form of a separate course, units of a new course, units of existing courses, infusion into existing courses, or a combination of these.

The second step deals with the preparation and the delivery of contents through teacher training, the production of educational materials (manuals, textbooks, visual and audio-visual aids) and evaluation.

Since each country has developed and established its own pattern for the second step, we shall concentrate on the first one, and more particularly on the characteristics of population education approaches to content construction (2).

Approaches to the Construction of Population Contents

Population contents in educational terms are concerned with population changes. The construction of population contents represents an effort to facilitate a more rational comprehension of population changes, or in other words, it is an effort designed to develop an active comprehension (3) as to why and how these changes come about and as to what are the implications of such changes both for the individual and society.

For the purposes of educational relevance, it has become necessary to develop the population education contents in such a way that they correspond with the needs and particularities of a specific country, and the needs and cultural requirements of the learners. In the process of construction of population contents, three related approaches are used in order to render them meaningful. These approaches are:

– Interdisciplinarity;
– The systemic approach; and
– The interrelation between the macro and the micro level.

Before developing these approaches we shall illustrate them by the following example drawn from the family life and population education programme in Paraguay. From its initial stages, the team responsible for implementing the project aimed at the development of an interdisciplinary approach by constru ing population contents with population information taken from different disciplines. The programme content thus developed had much information, however, this information was presented as a juxtaposition of population contents as it appeared in the different disciplines. The synthesis of the information had not been done. The programme was revised and it was decided that the best way to realize interdisciplinarity was to make different disciplines converge in the analysis of real concrete situations. Using this approach teachers' guides were prepared. The contents of the guides focussed on specific population issues and followed a pattern of definition of the problem, an analysis of the situation and the elaboration of conclusions.

To resume, the materials look like this:

Focus: Human settlements, environment and the family.

Definition of the problem: The Neembecu Department is affected by cyclical floods that condition the socio-environmental way of life of its population. A recent flood produced important environmental changes that had a major impact on the human settlements and the family.

Analysis of the situation: The group has to analyse this situation with respect to:

(a) The environment

– effects of the flood on the productive quality of the land;
– consequences of a reduction (and disappearance) of basic agricultural livestock resources;
– breakdown in the equilibrium of landscape;
– reconsideration of the soil as a resource base.

(b) Human settlements

– massive emigration from the flooded areas;
– crowding in temporary settlements;
– a new (social, economic, political, religious) order of the affected groups as a consequence of their relocation;
– needs for food, health, housing and other services as a consequence of the relocation.

(c) The family

– consequences of the flood and the relocation on the cohesion of the family;
– reassignment of roles within the family structure and its impact;
– health and hygienic conditions and their repercussions on the affective/sexual relations;
– restructuring the value scale in the family dialogue.

Elaboration of conclusions, related to:

– the impact of the flood on the quality and quantity of resources raw materials, energy and food;
– changes in the relation among population, resources and redistribution of human settlements;
– a new perception of the family with respect to its affective/sexual functions (4).

The analysis in the above example demands the capacity to handle in a practical way, the basic analytical tools specific to different disciplines, such as sociology, demography, environmental sciences, resulting in an active participation of the learner in the development of an integrated production of knowledge.

Interdisciplinarity

In the construction of population contents, there usually is an initial difficulty because of the abstract nature of the concept of population itself, which is delimited by arbitrary criteria such as time

and space. A population is the number of individuals, in a given moment, in a given geographical area. With time, this number changes because of births, migration and death. But the consideration of changes of numbers alone is an exercise meaningful only in mathematics; it provides no information as to the reasons, processes and consequences of these changes. In order to make population contents relevant these have to be perceived in relation to other factors. For example, the number of a present and future population can be related to the need for provision of health services for them. However, a meaningful construction of contents goes beyond making a simple relationship. The characteristic of population contents is that the population is considered as part of a set of interrelations, which includes the characteristics of factors that interrelate.

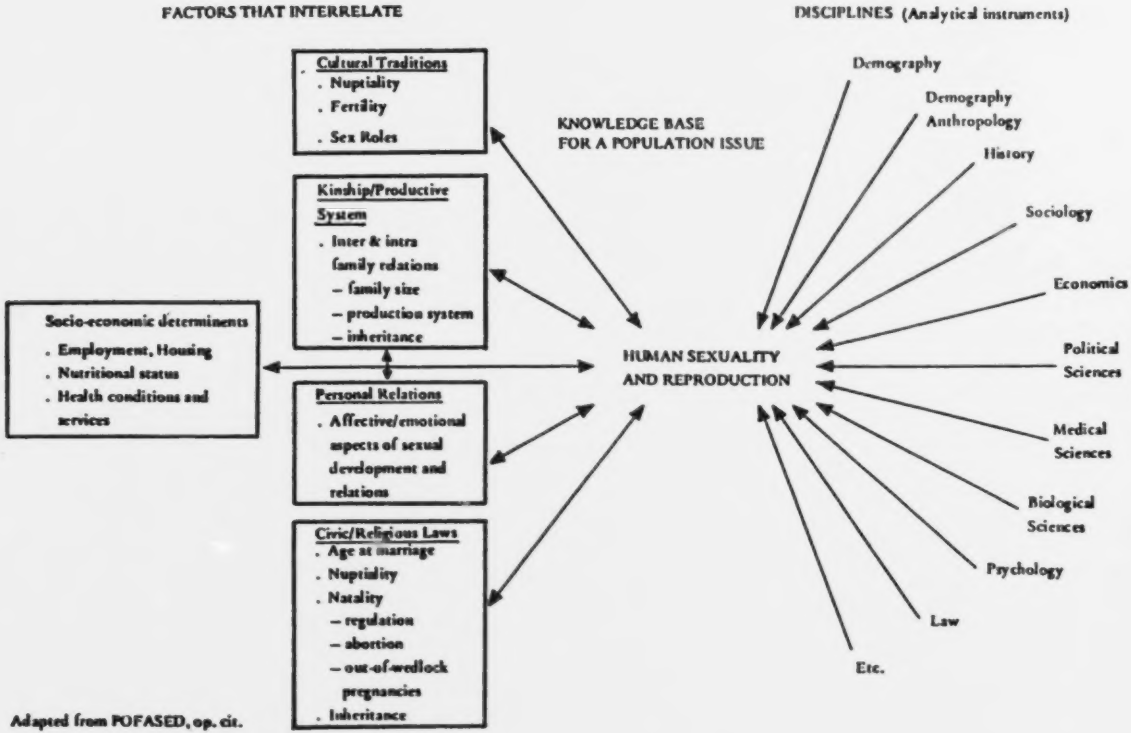
Diagram 1 (see below) underlines the fact that population contents are drawn from different disciplines, and that these have to be integrated in a meaningful way in order to reflect their multi-dimensional nature. In other words, they require an interdisciplinary approach.

Interdisciplinarity is proper, though not exclusive to population education. Because of the novelty of this approach in education, it may be useful to elaborate on this concept. Interdisciplinarity has been defined as «the meeting and cooperation of two or more disciplines, where each of them (at the level of theory or empirical research) bring their own conceptual schemes, their way to define problems and their method of research» (5). The encounter and cooperation of different disciplines is useful not only for the merging of disciplines; in education its importance resides in that focussing on a particular situation, the interdisciplinary approach allows for the development of a new understanding of that situation, an understanding which is fuller in meaning because it highlights the multi-dimensional characteristics of the situation considered. It also has the additional advantage, in that, considering the already crowded curriculum, interdisciplinary contents appear not as another subject but as a synthesis of knowledge.

Systems Approach

The example from Paraguay also reflects the systemic approach that is complementary to interdisciplinarity. The situations therein considered – the environment, the relocated population and the Family – can be perceived as systems. A system is defined as a set of discrete elements that interact to attain a particular goal (6). Each system is a coherent and indivisible whole that can be distinguished from its surroundings. (The environment, the relocated population, the family). Moreover, this whole is organised reflecting the dynamic and reci-

DIAGRAM 1 : INTERRELATING FACTORS AND THE INTERDISCIPLINARY APPROACH FOR THE ESTABLISHMENT OF A KNOWLEDGE BASE



Adapted from POFASED, op. cit.

procal interactions of its various components where any change in one element will necessarily change others and consequently the system itself. (The river that flooded). A system cannot be reduced to the sum of its parts, since the latter does not have the same significance when studied in isolation as when seen as a contribution to the whole. (A family is more than the simple addition of its members, and the members derive their significance from the whole). If we looked at each component separately, we might miss the factors that constitute the system itself, namely, the dynamic interaction between them.

Macro and Micro Levels

There is yet another essential approach to the development of population contents. Although the interrelations between population and development are not yet fully understood, all national authorities are aware of the need to give serious consideration to the population dynamics of their society particularly at the overall planning level. This overall societal level is referred to as the macro level and the population contents are concerned with large numbers of populations as they interrelate with the major sectors of development. But whatever the laws (social, political, economic, environmental, cultural) that govern the evolution of population phenomena, they are of necessity dependent on the decisions and actions of individuals, as for example, with respect to reproduction, marriage or migration. Individuals are called population actors when they take part in population-related decisions or actions which affect population phenomena. A characteristic of actors is that their action is social; actors always act or react in diverse ways by relating their needs to what they perceive to be the prevailing social, economic and cultural contents of their surroundings: peer groups, the family; the immediate community. This level is referred to as the micro level. Within the framework of development, population education contents, taken as a whole, are focussed on the interrelations between the macro and the micro level. Thus, on the one hand they are concerned with understanding the process whereby the society influences the population actors (the individuals) and how their actions influence the evolution of society. On the other hand, they are concerned with an educational effort to bring together in a meaningful way the possibilities and requirements of society and the needs and aspirations of individuals. The area of interaction of the macro and the micro level is referred to as the quality of life; the goal of population education is to improve the level of the quality of life.

Since population contents may tend to be all pervasive, it has been necessary to develop selective frameworks that contain the most relevant population issues for the construction of contents. A typical population education programme will organize its contents on the basis

of the following four major areas: a socio-economic development framework, with emphasis on socio-demography; an environmental, eco-system framework, with concern over the population-environment relations; a sexuality and personal development framework, and a family welfare framework with emphasis on family structures and family roles. The first two frameworks can be perceived as pertaining either to the macro level or the micro level; the other two are seen mainly as belonging to the micro level; but have major implications at the macro level and the reproduction of society and the family institution. All of them are developed on the basis of interdisciplinarity and the systems approach.

The relative importance given to one particular framework is dependent on the needs and type of population issue to which the programme is addressed. One programme may be concerned mainly with the sexuality and personal development framework, but it will include contents of the other three frameworks. Another programme may be concerned mainly with the socio-economic framework, likewise it will contain aspects of the other frameworks. While in the early stages of the development of population education the content focussed mainly on the macro level, as is reflected by the dividing line in Diagram 2 there is now a perceived trend towards attaching greater importance to the micro level.

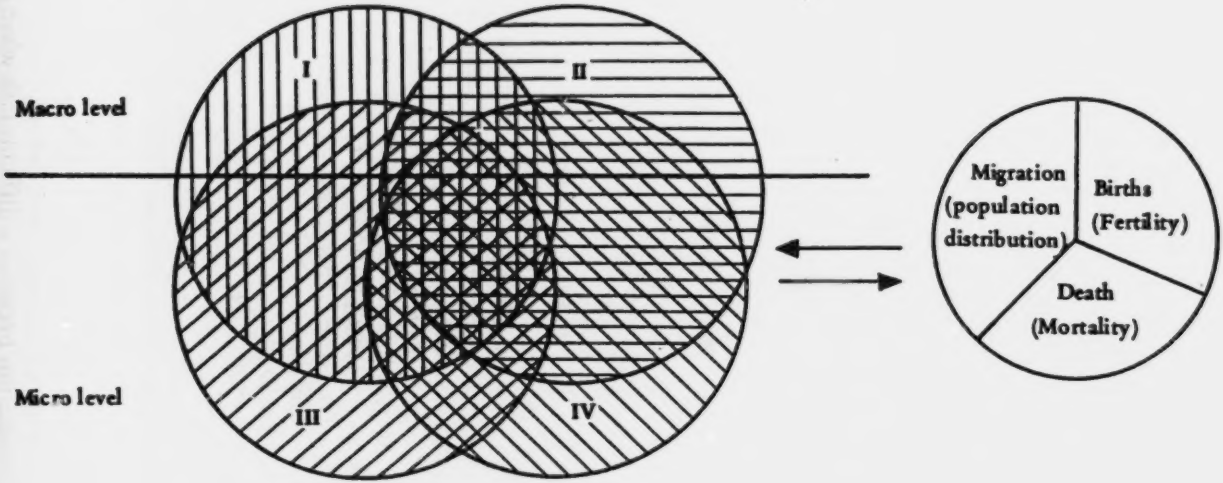
Educational Imperatives

It is commonly accepted that educational contents should meet the following three imperatives: relevance, coherence and balance. These imperatives are considered here in so far as they influence and condition the construction of the content base; as such these imperatives constitute constraints to content construction. The use of the approaches described above appears as a facilitating factor for the purpose of meeting the requirements imposed by the imperatives. They appear as solutions rather than additional problems.

Relevance means that the construction of contents should adjust to the particularities and needs of the national situation; to the needs, interests and possibilities of the learners, and to the state of the art of the knowledge areas included in the four main frameworks. National research on socio-cultural studies, population studies, knowledge-attitude-practice studies, the use of research results, the understanding of the population situation and the identification of the main issues concerned are the leading instruments that ensure relevance for the construction of population contents.

Coherence refers to the internal logic in the contents that is expressed as the absence of contradictions among them. The requirement of non-contradiction becomes a difficult task when dealing with

DIAGRAM 2 : OVERLAPPING FRAMEWORK AND THE FUNDAMENTAL POPULATION PROCESSES (1)



I. Socio-economic development framework

II. Environment, eco-systems framework

III. Sexuality and personal development framework

IV. Family welfare framework

Adapted from POFASED, op. cit.

population contents because concrete situations often express themselves in contradictory terms. For example, when considering the population-environment relations in the Sahel, where the Sahara is estimated to be advancing south at an average of 15 kms. per year, there is on the one hand the need to preserve a sufficient resource base to support human life and to stop desertification; on the other hand, there is the need for the sahelian population to feed their cattle – their means of livelihood – and to obtain fuel for cooking and housing. How do they reconcile these contradictory needs that constitute vicious cycles? Should the coherence of contents reflect such contradictory situations consistently, as contradictions, or should they – with a focus on migration policy – guide the reflection of learners towards the «pros» and «cons» of rural life? Or towards the «pros» and «cons» of urban life?

Apart from this overall aspect, coherence should also be expressed in the articulation of contents in their vertical progression, in ensuring that the contents at a given grade are adapted to the acquisition of knowledge of the preceeding level, and as well as in their horizontal dimension at a given grade.

Within this perspective and although this aspect overflows into the area of curriculum development, it should be said that in population education it is of importance to follow a two-pronged pattern in the progression of contents: one following the affective needs of the child's personal development; the other proceeding from what is known, his immediate surroundings, to the unknown.

Coherence should also reflect an appropriate articulation between contents, methods and means where attention is given not only to the adequacy of population contents and methods in themselves, but also to those of other subject matters, whose methods may or may not be consistent with those of population education.

The imperative of *balance* refers to the search for equilibrium in the contents in several ways. One is the search for balance between contents and the value system of a society. For example, when dealing with sexuality, should contents seek to reinforce traditional values and norms? Should they be treated in a way that reflects an adaptation to the evolving values and practices of «modern» (urban?) youth? Or should they seek a balance between tradition and modern values in behaviour? Should contents express a prescriptive or non-prescriptive approach? There is also the need to obtain a qualitative equilibrium between the population contents themselves as described in the four frameworks above, and between population contents and the contents of other areas of knowledge. Finally balance is also required in quantitative terms both within the population contents and those of other areas (time allotted, workload, number of activities, etc).

Methodological Implications

Up to now the pedagogical act is essentially reflected in the manner in which the relation teacher-learner is carried out (7). This process is conditioned by three interrelated elements: by goals of education as they are expressed through the curriculum design and the contents developed; by the role assumed by the teacher and the learner in the learning process; and the pedagogical techniques used by the teacher in order to attain the desired goals. If, as mentioned above, the goal of population education is to develop an active comprehension as to why and how population changes come about and what are their implications, it is necessary that the three conditioning elements be organized in a way that is conducive to the attainment of the goals. Usually, this organization of the elements calls for innovations in the curriculum design and content construction, in the role of the teacher and the learner and in the methods employed. We shall now concentrate on the last two elements.

Traditionally the teacher has had an authoritarian role. He is the seat of knowledge and delivers it through prefixed lectures. The learner, is he who does not possess this knowledge and is there to try and acquire, by whatever personal means he may have, the knowledge that is being offered to him. The active role is that of the teacher, the passive role is that of the pupil. Nowadays there is much debate about this type of education because of a growing concern with its limitations as they are evidenced by high rates of repetition and drop-outs, the inequalities it generates, its inadaptation to the social needs and overall quality of education issues.

When dealing with population contents there is a need to modify the traditional teacher-learner relationship in the sense of operating a transfer of the focus of attention from the teacher to the learner. There are several reasons for this. One of them is that with respect to population issues, the student cannot be considered as not knowledgeable. The learner already has a stock of knowledge which he has acquired from his experience outside the school realm. His knowledge may be incomplete, imperfect or mistaken, but it is that which he carries with him into the classroom. In fact the bases for the acquisition of new knowledge is precisely the students initial knowledge. One of the teacher's main functions is to induce the learners to express this knowledge so that on the one hand the learners can effectively identify themselves with the contents and on the other hand the learning process can be adapted to their needs and not vice versa. The teacher's role changes from an authoritarian role to a facilitating one. The student has to be stimulated into changing from a passive role to an active role in the learning process.

Another reason for focussing on the learner is that, ultimately, all learning depends basically on the pupil. If what is important is that the learners learn, attention must be given to the characteristics of the learner and to the motor, verbal and mental processes that occur in him during the learning situation. Teachers then, have to be more concerned with the stages of development of the child, which is gradual and sequenced, than with the contents themselves; on the problems and processes of learning than on the problems and processes of teaching.

A third reason is drawn from the aims of population education. These are basically concerned with the harmonious development of the learner's personality by trying to give him a sense of self confidence and of self value as a personal base for valuing others, and to acquire mental and social skills for the establishment of relationships at the personal level and at the societal and environmental level. Population contents, although they convey factual information addressed to the cognitive level, they are more concerned with results at the level of the affective domain and with the psychological dimensions of behaviour of the learner.

To focus on the learner and the learning process implies that innovations have to be introduced in the teaching-learning activities. There is a series of «new» techniques labelled «active» or «participatory» methods which as the name indicates, are conceived to induce the student into taking an active participation in the learning process. The criteria that have to be kept in developing these activities are the following:

– each activity must reflect for each student and in a direct way, his interests, problems and needs;
– each activity must develop knowledge, skills and aptitudes through a practical process and not through a repetitive and memory one;
– the activity does not have to be difficult to do in order to have a high learning value;
– each activity must reflect a problem posed by the student and which he can solve in a fixed period of time;
– activities within the community should give the student the opportunity to use his acquired knowledge, skills and aptitudes within the limits of the local reality;
– there should be a great variety of activities that can correspond to the diverse interests of each student;
– each activity must indicate an estimated number of participants;
– each activity is a means to attain a goal (8).

Activities based on the above criteria may be implemented through participatory methods such as group work, used to develop skills in personal relationships and small groups by relieving the authority of the teacher as it fosters the horizontal relationship among

students and requires the contribution of each of them; educational games, that introduce the play dimension into the learning process; close to games is role-playing and simulation where students are led to understand and assume different roles in structured situations, as for example in a family situation; and the inquiry and discovery methods which facilitate the development of a scientific approach and place the students in a concrete historical situation where they have to collect the information, establish relationships between elements and draw conclusions.

Secondary Effects of Innovation

Since educational innovations do not occur in a vacuum but are introduced into educational systems, they always generate and facilitate fall-out modifications in content and/or methods and/or materials in other areas of the system. Such modifications are the secondary effects of innovations.

These type of changes respond to specific needs which are identified according to the characteristics and evolution of the system, as can be for example the development of a diversity of materials, in the form of teacher guides, student books, reference books, resource texts, and visual and audio-visual aids. Because of the specificity of the needs of each system, in principle, secondary effects do not tend to be uniform throughout the educational systems of different countries.

The above notwithstanding, similar secondary effects have occurred in countries having very diverse socio-economic and cultural settings. Based on the experience of different country programmes, some such secondary effects may be mentioned.

In the area of educational sciences, the introduction of population contents have led to a focus of interest on the relation between the role of education, motivation and attitude formation, and the role of traditional practices and values. This has been extended even to the area of religion requiring the examination of population issues within the framework of doctrinal, scriptural and ethical problems (Paraguay, Somalia).

In several countries, the role of population education has also been enlarged to cover areas which had been traditionally confined to the «private» or family realm; particularly in the case of the introduction of themes dealing with human sexuality into the curricular.

This has also led to reconsideration of the scope of guidance and counselling offered to students at secondary level (Panama).

A new critical attitude has also been fostered in educational practice (Korea, Honduras). Such an attitude has developed both with respect to the value systems through a process of value clarification which requires the examination of acquired pre-conceptions and

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stereotypes, and with respect to the self, in as much as the knowledge is intended for personal application in population-related personal decisions.

The interdisciplinary approach has in some cases led to or reinforced the orientation towards an integrated curriculum design. This has resulted in a decompartmentalization and a more structured organization of knowledge through links established between different subject areas (Sierra Leone, Malaysia). Interdisciplinarity has also facilitated the development of criteria for the selection of the socially more relevant themes, conversely allowing for the deletion of less relevant themes (Philippines), while also facilitating the introduction of other themes of new relevance, such as education concerning the use and abuse of drugs.

Several changes have also occurred in the relations among teachers, students and parents. Because of new methods in teaching that focus more on dialogue than on lectures, teachers have been encouraged to pay greater attention to the views expressed by students, particularly when dealing with emotionally charged themes, leading to a personalized type of education. As a result, in most countries, a new climate of confidence has been generated in the classroom. The nature of the themes developed has also reinforced the links between school and the community. Trying to avoid the traditional gap between what is learnt at school and what is learnt in the family, teachers have tried to work more closely with parents, facilitating a two-way participation process in the education of students (Philippines).

With respect to parents, efforts have been geared towards the development of special programmes such as those conducted by school teachers for parents and which are complementary to those given to students in order to avoid a generation gap in population education (Nicaragua).

The change of focus of the new teaching methodologies and the social dimension of contents has given rise to a broad range of reactions on the part of the teachers, among which are a greater awareness of the social responsibility of their profession, the extension of the reach of their work beyond the cognitive level into attitude and behavioural spheres, a desire towards new learning enhanced by the importance of the issues considered, a motivation to have recourse to outside specialists to participate in their courses and to encourage «team teaching», as in the case of Tunisia.

The area of research and evaluation has also benefitted from the introduction of population education. In most countries the need to construct contents that are relevant has called for the participation of Universities and research centres in this process, fostering collaboration from Ministries of Education and research institutions. This collaboration has also been extended to the requirements of evalua-

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tion. Most countries have developed formative and summative evaluation procedures for education; however, since some population education programmes have specific behavioural objectives (Haiti, Korea) it has been necessary to develop longitudinal techniques in order to assess changes in the attitudes and behaviour of students with time.

CONCLUSION

It has not been possible here to develop in detail, or even discuss a number of issues identified, in particular those related to curriculum development and the strategies for the conduct of innovation. The aim of this article has been to put forward a set of criteria that may be useful to follow when attempting to introduce population contents into the curriculum of schools. Experience shows that, perceived in the manner discussed here, population education, by the nature of its contents and by the learning methodologies required, can become and has become in some countries, a major source for the renewal of education.

NOTES

(1) For an analysis of innovations from the perspective of systems analysis see «A Systems Approach to Teaching and Learning Procedures. A Guide for Educators», Unesco, Paris, 1981.

(2) For a discussion on teacher training in population education, refer to the article of A. Ukaegbu in this same volume. A more comprehensive and detailed account can be found in POFASED «Preparing Teachers for Population Education»: a Handbook, Unesco, Paris, 1984. For a discussion on educational materials refer to the article of A. Krystall in this same volume.

(3) The notion of «active comprehension» used here encompasses the dimension that the concepts developed may follow a prescriptive or a non-prescriptive approach. Prescriptive approaches are usually developed within the framework of national population policies and support normative objectives. Non-prescriptive approaches seek a formative purpose rather than seeking the establishment of specific norms or predetermined behaviours.

(4) Informe Final PAR/79/P10, Junio 1984.

(5) Unesco. Interdisciplinarity and the Human Sciences, Unesco, Paris, 1983.

(6) «A Systems Approach to Teaching and Learning Procedures» op.cit.

(7) It is likely that the personification of the teacher in the teacher-learner relationship will tend to disappear with the introduction of audio-visual techniques. However the fundamental relationship

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between teacher-learner will remain since the place of «personified» teacher will be occupied by the programmed «machine» teacher.

(8) Steps Towards a Flexible Curriculum. D. Lemke. OREALC. Unesco, 1981, pages 107 and 108 (in the spanish version).

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Alfred O. UKAEGBU*

TRAINING NEEDS IN POPULATION EDUCATION IN AFRICA

INTRODUCTION

Generally, two broad categories of personnel may be identified when discussing training needs in population education in Africa South of the Sahara. The first group is comprised of the Programme staff. These are the professional personnel responsible for planning and management, for designing the curricula and instructional materials, developing appropriate methodologies, providing training for teachers, and for undertaking research and evaluation. Included sometimes also into this group are such other programme leaders and facilitators as educational policy makers, inspectors of education, educational planners, etc...

The second group comprises of actual teachers of population education programmes. These may also be categorised into three on the basis of their location and roles. They include:

(i) pre-service teachers;
(ii) serving teachers; and
(iii) out-of-school population educators/animators.

This paper attempts to discuss both the common core of and the specific training needs for all the above categories of population education personnel in the African region. In order to hasten national self reliance and institution building, the paper emphasizes the complementarity of roles between the national Government authorities and the supporting external agencies.

PREDISPOSING FACTORS

A number of factors will clarify why training need exists in the field of population education in Africa. The subject itself is recent in the education curricula of some countries: it has not yet found its way into the curricula of all African countries. In a number of countries, education ministry authorities are not yet certain about its objectives,

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content, strategies, the skills to be developed among learners. This seems to be the particular case when the concepts of population/family life education are wrongly interpreted to mean giving contraceptive information to pupils, or simply as birth control.

Perceptions of population issues and problems differ not only between countries, but also within countries. When perceptions differ between policy makers and policy implementors (education authorities), a rapid institutionalization of population education programme is likely to be inhibited. Thus top level political authority must be given the means, facilities and factors to provide a high level political support and adequate resource allocation for the programme. As regards the implementors of education policy acceptance of population education into the existing curricula will depend upon such factors as:

(i) the degree of commitment of the responsible education personnel;
(ii) their knowledge and understanding concerning the relevant population issues and problems of their society;
(iii) their training cognitively, affectively and pedagogically in such matters, and
(iv) their own value preferences relating to population issues and problems.

As in most innovations, countries desiring to introduce population education into their education systems generally opt first to learn from the experience of others. They want for instance, to learn the purpose to be served by the innovation, the content that can be covered, the skills that can be developed, the strategies to be adopted, the probable impact upon learners, and the mistakes to be avoided. For this purpose external technical assistance may be sought to provide exposure through some sort of training which would guide thinking and action. This is what has actually happened in those African countries where population education has been introduced in recent years. External assistance has not been limited to technical problems, it has frequently extended to the request for financial support to implement certain components of the programme.

The content of population education is obtained from the generic subject called population studies which denotes a body of knowledge, theories and concepts which attempt to explain the dynamics of human populations and their interaction with other social, economic, political, cultural, biological and ecological environment. It therefore draws from such established subject areas as demography, geography, history, sociology, economics, anthropology, mathematics, statistics, biology and medical sciences. Each of these disciplines and professional fields sheds light on one or more aspects of a given population issue. Population education being multi-disciplinary in content requires skills in developing a body of suitable materials for the desired message as appropriate to the national situation.

In organizing the content of population education an even greater skill is needed to ensure the achievement of the objectives of population education in a given context. Since the objective of population education is to involve people in a learning process to increase their awareness and understanding of population issues, and to develop in them appropriate skills for rational decision-making on those issues in ways personally meaningful and socially desirable, it is essential that the content be broad enough to cover the various dimensions of a given issue and trace how those issues affect or are affected by other quality of life factors.

Both in the school and out-of-school subjects, the modality of integration of population education concepts calls for special skills, specially when the establishment of a separate subject is not contemplated. The content of the existing carrier subjects must be reviewed and appropriate plug-in points identified at different grades.

Of critical importance in the development of population education programme, is the goal of changing attitudes and behaviour of learners towards population issues, in ways personally meaningful and socially relevant. To provide cognitive knowledge about population matters is much easier. Hence the necessity for devising and encouraging the application of appropriate instructional methods and techniques to obtain active learner participation.

Most of the issues and problems studied in population education involve systems of values, sometimes challenging to traditionally held beliefs, customs and practices. For instance, issues concerning values of children, preferences for sons, polygamy, etc... have social, economic, political and religious implications for different societies and the population educator must acquire skills in values clarification to ensure objectivity in presenting such issues for classroom discussions and decision-making.

TRAINING NEEDS

Training needs can be categorized into two: the core or major needs, and specific needs. The core needs can also be sub-divided into two. These are:

– to train adequate numbers of population educators for each country programme, including programme staff and the actual teachers of the subject and

– to train teachers for new roles by the applications of the methods of population education.

The first of these major needs is a quantitative one which was expressed by the representatives of the country programmes during the Regional Consultative Meeting on Population Education in Unesco

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Dakar in 1983 (1). Training adequate numbers of population educators demands careful job analysis, identification of training needs and suitable trainees; internal and external availability of resources for the execution of training activities, etc... The second major need is qualitative in character. It is also in conformity with many recent recommendations towards educational reform and specially towards modern trends in teacher education (2).

On the other hand some of the training needs are specific to certain categories of population education personnel. A summary of the core and specific training needs is provided in the diagrammatic scheme (see table 1). This scheme introduces at a glance four basic concerns relating to training needs. These are:

(i) the trends;
(ii) the strategies;
(iii) new techniques; and
(iv) key programme content.

TRENDS IN STAFFING AND IN ORGANISING TRAINING

The programme staff of population education programmes have tended to constitute also the planning and management team. Although in principle it is possible to give the planning responsibility to one individual, it is usually considered preferable to assign the task to a group. This is generally composed of people with population education curriculum and educational planning experience. Less frequently the team may be enlarged to include evaluators, graphic artists and representatives from the major institutions expected to be involved in programme implementation. The enlarged body may function as an advisory committee to the programme staff. Usually the programme has a recognised leader or director.

There is no single setting best suited to the needs of population education. Rather, in most countries, there are a range of institutions which can be used to facilitate the location of the population education unit and population learning. Ideally the programme staff should be experienced in population education. In practice however most of

(1) See Unesco Regional Office for Education in Africa, Dakar, 1983: *Regional Consultative Meeting on Population Education, 2 – 11 November: Final Report*, page 15.

(2) See for example (i) International Commission on the Development of Education, 1972 *Learning to Be* (the World Education today and tomorrow, Paris, Unesco: Harap) (ii) Unesco, Paris, 1981. «Workshop Guide for Teacher Educator». Document ED/HEP/TEP/81 225 – ED.82.WS.13, part C. (iii) *Conference of Ministers of Education and those Responsible for Economic Planning in African Member States*, Harare 28 June – 3 July, 1982.

TABLE 1

TRENDS IN TRAINING, STRATEGIES AND NEW TECHNIQUES IN POPULATION EDUCATION

PROGRAMME STAFF

A	Trainers of Trainers	Classroom Population Educators	
		Pre-Service Training	In-Service Training
B	Study Tours Fellowship Block Training On-the-Job Training Project Inter-change Bi-Annual Consultative Meeting	Face-to-face Training/learning	Phased face-to-face Teaching/Learning Self Learning Modules (Master Teacher Support) Distance Teaching Correspondence

NEW TECHNIQUES

C	Use of the multi-media	Independent Learning	Group Process
	Inquiry/Discovery Interaction Analysis Role Playing Simulation Team Teaching Peer Teaching Values Clarification	Inquiry/Discovery method Role Playing Debates Simulation Excursions Guest Lecturers Assignments Values Clarification	Inquiry/discovery method Team Teaching Micro Teaching Peer Teaching Debates Role Playing Values Clarification

KEY PROGRAMME CONTENT

D

Orientation to Population Education
Population dynamics and Policy
Population and quality of life themes
Curriculum Development and Methodology
Preparation of Teaching Aids
Evaluation
Teaching-Learning Activities
Proto-type Lessons
Programme design, planning & management

them are not specialists in the field. The key position they occupy in programme planning and implementation enjoins that they function also as key resource persons or trainers in the new field. Coming from different academic and professional backgrounds, they largely require new orientations in knowledge base and methodology of population education.

Frequently the huge task of trying to train large numbers of teachers, especially serving ones, in population education over-stretches the abilities of the Programme Staff to cope. In addition, owing to the multi-disciplinary nature of population education, extra specialists are needed and are invited to assist in the training activities as resource persons or as trainers of trainers. The majority of these are recruited locally by the programme staff.

A key programme staff whose duty is central in planning and implementing training activities is the training officer. In Africa few programmes have specifically identified an officer charged with this responsibility. Competence in training is a scarce skill which every programme ought consciously to cultivate. In Sierra Leone, a programme officer was specifically charged with this responsibility while in Nigeria a sub-committee of the Population Education Committee has the duties of identifying training needs, introducing appropriate teaching-learning aids, and running in-service training workshops for serving teachers and other personnel.

Decision concerning levels and grades at which population education may be taught are often left to national authorities, particularly Education Ministry authorities. Similarly decisions concerning content and modes of integration* have immediate implications on the size and levels of classroom teachers to be trained. For instance, the decision to integrate population education as a unit within social studies in secondary classes I – III in Sierra Leone set the limit of teachers to be trained to social studies secondary teachers. On the other hand, a decision to integrate population education into many revised subjects areas at the primary and secondary levels in Somalia implied the training of the large number of teachers for primary and secondary classes.

Where population education has been introduced into the curricula of the Teachers' Training Colleges (as in Sierra Leone's Milton Magai Teachers' College and in Somalia's Teachers' College, Lafoole) pre-service teachers receive the training as a component of their normal

* There are several methods of integrating population education into the existing Curricula. These are: as a separate subject, or as a unit of a new subject, or as unit of existing or revised subjects, or as components of existing subjects inserted at convenient plug-in-points.

training programme. Nevertheless in view of the urgency to launch the programmes once announced by education authorities, the biggest emphasis has tended to be laid on in-service training of serving teachers and/or animators of out-of-school population educators. The concentration of training activities has thus been put on serving teachers in Sierra Leone, Somalia, Burkina Faso and on animators of out-of-school programmes in Somalia and Tanzania. Although both the pre-service teachers and the serving teachers could be trained by the same Teachers' College, the latter taking place as sandwich seminar workshops/courses during the long vacation, no Teachers' College has yet assumed this role in the African region.

STRATEGIES IN TRAINING

The training strategies can be analysed from the standpoints of the programme staff; teacher educators of pre-service teachers; and in-service training for serving teachers.

Programme Staff

The success or failure of population education programmes depends to a large extent on both the professional comptence and motivation of the programme staff. As mentioned earlier on some of them are likely to have little background in population or population education. It is therefore necessary to provide them with such training as will enable them lead the planning and implementation of the activities in population education. One of the training strategies that have been adopted to train the Programme Staff is the organisation of study tours by International Agencies for several weeks to visit established programmes in other countries upon nomination by their governments. The purpose is to expose them to the experiences of other countries so that they can learn on the spot, sometimes by participation in some of the activities of the host programme about what is happening, how it is being done, by whom, with what objectives and effects, and the strengths and weaknesses of the host programmes.

Among other things, the training requirements during study tours have included:

- Project planning and management (administrative and financial);
- Project monitoring including preparation of progress reports and evaluation;
- Collaboration with other agencies (especially the national, non-governmental, and international agencies in the country;
- Curriculum development and preparation of instructional materials;
- Training design and measurement of effectivenesses;
- Utilization and storage of instructional materials;
- Institutionalization of project activities.

It is expected that a coverage of the above items, would sharpen the thinking of the participants during the tour concerning the most efficient and cost-effective ways of planning and managing their own country programmes. Secondly, the exposure would equip them with some skill necessary for the professional and academic management of their programme.

To date only one country project in Africa, the Somali Project, has developed some capacity to receive study tours. The first experiment of this kind was made in April 1984 when the leaders of the Tanzanian out-of-school programme worked for two weeks with the Somali Project staff. The result was judged useful by the Tanzanians and their hosts. It is expected that with additional support to expand the Somali Programme, it will provide even more useful services in this capacity for other country programmes in the region. Hitherto, the previous study tours by other projects have been directed to either south-east Asia (particularly Thailand, Philippines, India, South Korea and Malaysia), and to France and the USA to a limited extent. In view of the progress made by the Tunisian programme, arrangements are underway to send the francophone programme staff from the region to the former on study tours.

The second strategy which has been tried by both Sierra Leone and Somalia is to send two of their programme staff overseas on fellowships to pursue a programme of studies leading to the award of the Master of Arts Degree in population education. In each case, one of the fellows was chosen from the science field academic background, and the other from the arts or humanities. The objectives were similar, namely to make available for the programme; adequate academic and professional skills in organizing the integration of population and population education concepts into the education curricula of their respective countries in both the science and arts subjects.

At least two handicaps presently exist with the fellowship strategy. Firstly, the courses are at present available overseas where the orientations may be at variance with the priorities of African countries. This problem could call into question the relevance of the knowledge acquired abroad in a typical African milieu. Secondly, unless adequate arrangements are made prior to the placement of the fellows about their roles in their country programmes upon their return, the question of the effective utilization of their knowledge and skill in project planning and implementation tends to raise other problems. The question is «how do they fit upon their return into an advanced programme»? The answer has not been easy to find. It is the recognition of this problem which led the participants in the Regional Consultative Seminar referred to above, to put long term academically-oriented fellowships last in their priorities for training. The participants also qualified their recommendation by suggesting that

such fellowships be based «upon commitment to the country population education programme and when it is desirable (3).

The third training strategy which has been tried primarily by the francophone programme staff in the region is block training of several weeks duration abroad, notably in France. The participants to this type of training activity have been drawn from Burkina Faso, Guinea, Benin and Niger. Whereas block training during which intensive courses are given to the participants have the potential of providing both the knowledge base and skills required for planning and managing country population education programmes, the orientations of these courses drawn largely from the priorities and value preferences of the overseas guest lecturers have not met properly the needs of the learners. The participants in the Regional Consultative Meeting took cognisance of this defect and recommended that the block training be undertaken in the Unesco Regional Office and in the country projects themselves.

The fourth training strategy for Programme staff is on-the-job training. This strategy pre-supposes the presence on the programme of one or more competent persons to provide the training to the less experienced colleagues. The country programmes best suited for this strategy are those that have either a competent national programme director or resident international expert(s). Invariably the latter case has been more likely. In some cases short-term consultants have provided this service. Thus, for example, the Somali Project staff (nationals) have benefitted a great deal from the on-job-training provided by the resident international expert: The Sierra Leonean on short-term consultants. Rarely have project staff exploited the learning opportunities that can be provided on-the-job either by self learning modules or by other local resource persons working in other institutions in the same country.

The fifth strategy which was given top priority by the participants in the Regional Consultative Meeting was project inter-change of programme staff. Yet this strategy has not yet been experimented upon in the region. The participants in the meeting saw in this strategy an effective way of sharing experience, learning quickly by doing, and spreading technical co-operation. The mechanics of implementation remains an obstacle to its implementation although they should not prevent trying it out.

The sixth strategy which was also accorded a high priority by those participants, is the organization of bi-annual Regional Consultative Meetings of country programme leaders by the Unesco Regional Office. Such meetings, focussed as they will be, will not only provide

(3) See, Unesco Regional Office for Education in Africa, 1983, op. cit. p. 23.

opportunities for sharing experiences, but will enable participants to learn through group process how certain activities are undertaken and their effects on other programmes. The ensuing discussions will provide valuable feedback to countries presenting their programmes and activities.

Teacher Educators and Pre-Service Teachers

Basically teacher education institutions have as their major function the pre-service preparation for primary and/or secondary schools teachers. As will be shown later in this paper the goals, content and methods of population education place it properly in the mainstream of modern educational trends for teachers training. The common modality of pre-service preparation is a face-to-face teaching-learning process between the student teacher and his tutor. The question of trend in this respect is only sensible with respect to the interdisciplinary nature of population education content, its use of participatory and discovery methods focussed on problem-solving, the application of which will make new demands on the skills and resourcefulness of the staff as well as in re-structuring of the time-table to accomodate field trips, excursions, surveys, etc...

From this point of view, four categories of personnel of teacher colleges may require training or some orientation in population education. These include:

– The administrative head of the college and his assistants who take most decisions pertaining to their college;
– The faculty staff who will be assigned the full responsibility for organizing the programme;
– Key educators in the ministry and curriculum development and research centres who define the policy guidelines and carry out inspection; and
– The pre-service teachers who would actually receive the preparation for the classroom teaching of population education.

For the administrative heads of Teacher Colleges, the Ministry of Education and Curriculum staff, a range of activities may be organized to give them the right orientation towards population education. These activities could include their participation in sensitization seminars; in-country and out-country study tours; training workshops; and the use of self learning modules or kits. The Sierra Leone Project exploited some of these approaches to motivate some college principals in the project schools. A number of them participated in over-seas study tours while most of them were invited to the national awareness seminar which preceded programme development.

With respect to the faculty team, preparation through a systematic advanced training in higher institution should be considered useful, possibly up to the Master of Arts Degree in population education.

However, the current experience in Africa is that only few teacher colleges have actually introduced population education into their programmes.

In one case (the Milton Magai Teachers' College, Sierra Leone) the faculty staff had backgrounds in geography and history. They have only participated in a series of seminar workshops organised by the Sierra Leone Project Staff and by their own college at the initial period. In Somalia, at least, four key staff of the Somali Population Education Project are currently teaching population education as a core course at the Teachers College, Lafoole. For the faculty staff and programme staff, the participants in the Regional Consultative Meeting recommended practical in-field training as top priority.

A number of alternative training programmes have also been suggested (4). One is the possibility of a «group training» programme at a regional level, organised by International Agencies. Another is embodied in the in-service training programmes for teacher educators organised by universities or national research centres. By emphasizing the introduction of new contents through participatory/discovery methods and development of skills through practice in specific tasks, the teacher educators are likely to acquire valuable knowledge and experience as they participate in the creation and development of school level population education programmes.

In-service Training for serving Teachers

To ensure the success of population education programmes serving teachers require training in the subject. No matter the scope of the programme, whether a pilot or full-scale country-wide programme, there is always the problem of training a large number of serving teachers who reside and work in different parts of the country. A number of strategies have been used to organize in-service training for such teachers. These include:

- Phased face-to-face teacher/learning;
- Use of self learning modules;
- Master-teacher approach;
- Distance teaching; and
- Correspondence.

The modality of phased face-to-face training through seminar workshops, may be organised by the Programme staff or by the Ministry of Education or by other Agency of Government responsible for teacher education, curriculum and research. Quite often it is a collabo-

(4) Unesco, 1983. *Preparing Teachers for Population Education: a handbook.* ED/83/WS/33 p. 32.

rative effort of two or more of these agencies. The target teachers are identified, elected and invited to participate in phased training activities which may last for 2, 3 or 4 weeks during each cyle. Depending on location and proximity of the venue to the homes of the trainees, the training may or may not be residential. Most phased training activities are undertaken during the school holidays when the classroom teachers can be released for longer periods. A training programme of 4 or 6 weeks may be phased into 2 or 3 cyles each dealing with one specific content, and the later training period providing an opportunity for the trainees and their trainers to assess more realistically the effectiveness of the earlier training.

Phased face-to-face training of serving teachers is the most common modality applied by population education programmes in the region. In addition to its convenience for both trainers and trainees it provides a chance to practise what has been learned, to assess its effectiveness and suggest content of the subsequent training activity. On the other hand, it is expensive to keep large numbers of teachers in residence for several weeks, and it takes a long time to reach all the target teachers in the country.

The introduction of self learning modules in population education was initiated in Malaysia in the late 1970s to reduce the cost of training a large number of teachers and to save valuable time. The population education team produced eight modules on such themes as – Introduction; Population change – Its determinants and consequences; Population situation in the world and Malaysia; Population Programmes in Malaysia; Population and Environment; Population and Resources; Population and Quality of life. It produced another module for school Headmasters who were obliged to hold 2–3 hours discussions with their teachers on each of the modules distributed to all of them.

The Unesco Regional Office in Thailand, Bangkok has improved upon the Malaysian self learning modules by producing a «Multi-Media Package» for the training of teachers of population education (5). This package which appears in six parts with an introductory guideline attempts to cover both the data base, methodology and audio-visual kit in population education.

In the African region an attempt to produce a similar self learning material has been made in Somalia. A booklet called «Learning to Do» has been produced by the Project staff in collaboration with the Visual Aids section of Curriculum Development Centre. This is a simple visual teaching-learning aids handbook of suggestions for teachers of population education (6).

(5) Unesco Regional Office for Education, 1982, *Multi-Media Package for the Training of Teachers of Population Education*, Bangkok.

(6) See, Mogadishu, Somalia, «Project Progress Report, December 1983», page 8.

The use of Master-Teacher approach has been adopted in a number of countries such as Sri Lanka, Indonesia and Somalia. The strategy is to identify and select the headmasters of schools, administrative and supervising staff of educational institutions and organize a residential training in the form of seminar workshop for them for several weeks. During the training, the master teachers work side by side with their trainers in developing content and in preparing teaching kits. At the end of the training they may be awarded a certificate (as in Somalia) in recognition of their new knowledge and skill. They return to their various schools to train other teachers in their respective schools. In Somalia the master teachers in turn award pre-designed certificates to their deserving teachers at the end of their local training. The project staff follow up the master teachers and their teachers through occasional monitoring visits and the administration of questionnaires. The adoption of this approach has enabled the programme staff to reach a large number of classroom population educators within a relatively short time.

Pakistan's Allama Iqbal Open University has tried to provide in-service training in population education to primary school teachers through correspondence and distance teaching. A one-week training course in population education was one of the components of the Primary Teachers Orientation Course which was aimed at reaching about 0.1 million teachers. Although this strategy has not yet been tried in the country programmes in Africa, it could hold out a potential for reaching a large number of teachers in those countries where radio listening and television viewing rates are high.

POPULATION EDUCATION AND THE USE OF NEW TOOLS AND TECHNIQUES

The innovative character of population education together with its goals, content and methods place it within the orbit of modern educational trends as suggested by the authors of «Learning to Be» (7). Listed in section C of table 1 provided in this paper are some of the new techniques which population education encourages.

By no means exhaustive, the list indicates the range of innovative instructional skills and activities which the population educator may exploit to re-inforce cognition and affectivity. Thus training activities for population educators of all categories aim at encouraging:

– The use of multi-media,
– Independent learning, and
– Group processes.

(7) Unesco, op. cit.

With respect to the use of multi-media strategy, the goal is towards encouraging active learning through a variety of activities and new techniques. Utilisation of multi-media implies using teaching aids such as videotapes, television, projectors (overhead and/or slides) charts, posters, comics, etc. It implies further that the teacher will learn how to use these equipment selectively, how to operate, maintain and store them. The examples of instructional methods that go with the new tools include micro-teaching, interaction analysis, team teaching, and simulation. The population educator is expected not only to familiarize himself with his new tools and instructional methods, but also to learn how to adjust himself to his new roles and functions imposed by the new technology. Besides, in view of the high cost of the new tools and the frequent lack of electricity supply in the schools where population education is to be learned, the trainer/teacher is expected to learn how to produce low cost substitute teaching aids with local materials.

As regards independent learning by the population educator the goal is to encourage self learning development and self appraisal through self instructional materials. A carefully planned training programme for teachers will include activities for independent learning, learning how to use new techniques, and learning to raise and solve problems. For example, the teacher could draw up a checklist of teaching skills which must be practised during a typical population education class – a checklist which would deal on such aspect as: Defining the objectives of the lessons; the content of the lessons; the development of the lessons and evaluation.

A training activity for population educators could provide an invaluable opportunity to enable the participants to prepare a self learning kit in population education. The kit will aim at covering the pertinent issues of objectives, content, methodology, teaching aids and evaluation which the teacher can use for self instruction and reference. Curricular issues, learning experiences, instructional skills and self evaluation questions could form important components of the self learning kit in the possession of teachers of population education. Illustrations of the application of such methods as inquiry/discovery, role playing, simulation, debates, excursions, guest lecturers, assignments and values clarifications should feature clearly in the kit.

With regard to group process the aim is to stimulate learning through participation in group activities in population education. Training activities tend to take the nature of «structured seminar workshop» with clearly defined objectives. The aims could be:

– To train the participants to acquire knowledge about population dynamics and policy; or

– To train them to develop curricular and produce instructional materials;

– To train them in the methods of population education; or
– To produce low cost teaching aids for reproduction and general use, etc... Whatever the objective, the learners will work together or in small groups with optimal participation of each participant and feedback. Each group or team will be assigned a specific task, with the trainer providing supervision and guidance as necessary. Before the end of the training activities, the various small groups will assemble in a plenary session to present, discuss and evaluate their respective activities. The application of such techniques as the inquiry/discovery, team teaching, micro-teaching, peer teaching, debates, role playing and values clarification will be emphasized. The participant must know that he is expected to apply the new techniques in his own classroom situation after the training.

The importance attached to three issues, namely inquiry or discovery, participatory method and values clarrification, cannot be overemphasized. Population education deals with issues which are intensely value-laden; issues which touch directly or indirectly on people's beliefs, customs, traditions and aspirations. Although correct information concerning those issues may exist with individuals, families, communities, and nations, yet because of certain traditions and rules such facts may be very difficult to obtain, or they may not be publicly discussed. Training the learner to find out for himself from his own environment, to analyse the facts and to draw conclusions is an objective way of establishing and confirming the truth and influencing attitudes and behaviour.

Population educators (including teachers) are products of their own societies. As individuals, as members of a family and community, and as citizens of a country, they are also involved in making population-related decisions, individually or collectively. Their decisions, like those of other people, are shaped by a complex of traditions and beliefs, by social, economic and political forces at work in their families, communities or countries. Therefore to ensure objectivity in teaching population education, it is necessary that the teacher makes his values clear to his students without biassing the latter's opinions and views.

Furthermore, population education aims at enabling the learners to acquire knowledge, skills, attitudes and values necessary for informed or rational decision making in population matters. But decision-making is not an end in itself. The learner must be able «to act» or show «an intention to act» in some way towards resolving the population situation which he has decided upon. An essential aspect of values clarification is that the population education programme should give the learners the opportunity to understand, experience and practise the making of decisions in ways which are personally rewarding and socially acceptable. Thus, a well-designed training programme for

teachers must include matters of discovery and participatory methods and values clarification.

KEY PROGRAMME CONTENT

The discussion of the importance of discovery and participatory methods and values clarification brings us to the issue of content of training programmes for teachers. What are the basic things that the population education programme staff and classroom population educators should learn? How deep should the converage be? Who should provide the training? etc... To answer the above questions it is necessary to emphasize that there can be no hard and fast rule about content, scope and organizer of instructions. Normally the content should derive from a country's perception of its population situation, problems and perspectives. The question of scope and coverage will also depend upon such issues as the extent of knowledge about the country's population characteristics; official decision on the level and grade of introduction in the country's education system; and the human and material resources available to the country for implementating the programme.

The decision concerning the organiser will depend again on what institutions in the country have the mandate and facilities to provide the requisite training. Section D of Table 1 of this paper provides a summary checklist of suggested key content of a training programme in population education. By no means exhaustive the checklist contains the minimum requirements for all population educators.

1 –Orientation to population education

The learners will be led to understand the concept of population education – its definition, goals, issues (especially as they relate to content areas, cultural and religious constraints, problems of multi-ethinic societies, and the use of concepts like quality of life, folk demography); population education programmes in schools and out-of-school – their structure, levels and modes of integration, the teacher's role, and population education in the context of socio-economic development programmes.

2 –Population dynamics and policy

The learners will study the interaction of population processes and socio-economic development in different societies (developed and developing) with particular emphasis on their own continent, country and family. They will learn about the determinants of population change (births, deaths, migration) and the consequences of population

change in different societies, their country and the family; issues related to family formation, family size, sex preferences, family stability; and causes of migration. They will learn about population policies (explicit and implicit) – globally, regionally and in their own countries – their objectives, implementation, expected outcomes and constraints. They will learn about other policies of governments which have direct or indirect effect upon population processes.

3 –Population and quality of life themes

The learners will learn about the complex interaction between population and other phenomena which directly or indirectly affect people's life quality – for example: population and ecosystem, population and food production, distribution and consumption; population, energy supplies and consumption; population and education; population, housing and human settlement; population and health, population and employment, etc... Examples will be shown from developed and developing countries, with particular attention paid to their own countries.

4 –Curriculum development and methodology

The learners will investigate the needs and psycho-social and cultural background of the targets of population education (eg. primary school pupils, secondary school pupils, youths out-of-school, etc...). They will review existing curricular and instructional materials to ascertain relevance, comptability and appropriate plug-in points of population and population education content. They will learn to prepare curriculum materials, outlining objectives, themes, content, methodology and learning outcomes. ,

5 –Preparation of teaching aids

The learners will learn how to prepare, use and store both the modern technology-based teaching aids and locally made low-cost aids. Improvisation will be emphasized, and learners will be encouraged to prepare such materials as can cheaply be replicated.

6 –Evaluation

The learners will learn how to prepare evaluation instruments such as objective tests, situational tests, questionnaires, checklists, attitude scales and projective techniques. The administration of these tests should enable the learners to learn about pupils' attainment and reactions to instructions, and how to compare various aspects of instructions.

7 –Teaching-Learning activities

The learners will be led to learn and devise teaching-learning activities that will encourage active pupils' participation and have effective outcomes. Activities to be encouraged may include visits, surveys, community projects, simulations, games, role playing, films, small group discussions, debates, case studies, observations, inductive formulation of concepts and generalization; preparing learning materials, etc...

8 –Prototype lessons

The learners will learn through practical demonstration lessons during their training sessions how to conduct population education classes on certain topics for certain levels of pupils. Topics like child spacing, preference for sons, decision-making, etc... can be demonstrated by trainers giving the learners the opportunity to evaluate such lessons from its planning stage to the end. Such lessons and their critiques could be compiled in a book form and distrubuted to different relevant schools as teachers' guides.

9 –Programme design, planning and management

The programme staff will acquire the necessary knowledge and skill for an effective designing, planning and management of their country programme. Such knowledge and skill may be acquired not only on-the-job but essentially through study tours, internship with other well established programmes and through a regular programme of studies in population education.

THE ROLE OF INSTITUTIONS OF HIGHER LEARNING

In most of the established population education programmes in Asia, the institutions of higher learning, notably the universities, have co-operated with the education Ministries in promoting the teaching of population education, organizing seminar workshop in which faculty staff functioned as resource persons, and in preparing instructional materials.

In a number of African countries where population education has been introduced into the education system a similar support as in Asia has been provided by the institutions of higher learning. In Sierra Leone, for example, the University Colleges at Fourah Bay and Njalla, respectively, have provided resource persons during training and writing workshop activities. A number of courses offered in the two university colleges focus either directly on population dynamics, or

on some other disciplines like geography, economics, sociology, etc... but at the same time incorporate population content. However, there is no regular programme of studies yet in the two university colleges that is focussed on population education *per se*. On the other hand, at the Milton Magai Teachers' College which prepares secondary school teachers, a deliberate attempt has been made to introduce the teaching of population education to pre-service teachers. In this college, population education constitutes an important component of the social studies course. In fact, the new course which was introduced in 1982 is called «Social Studies and Population Education».

Another example may be taken from Somalia. In 1983 the faculty of the Teacher's College at Lafoole decided to introduce population as a core course available to all the students of the college. In co-operation with the Programme Staff of the Somali Population Education Programme, this course is now being offered to the students, with the programme staff doing most of the teaching.

In Nigeria, a strong co-operation was developed right from the beginning between the University faculty and the Nigerian Educational Research Council which is the body responsible for the implementation of the Nigerian population education programme. A number of senior faculty staff of at least, five Nigerian Universities serve as leaders or members of Population Education Sub-Committees. A Sub-Committee is charged with specific responsibility. The sub-committees whose names suggest their responsibilities are as follows:
- Research and Evaluation;
- Curriculum;
- Teacher Training;
- Population Awareness; and
- Materials production.

A number of other institutions of higher learning have indicated their interest to participate in the development of population education in their countries. Some examples include the university of Dar-Es-Salaam in Tanzania; Edward Mondlane University in Mozambique; University of Liberia; University of Zambia and the University of Lesotho.

Two needs seem quite urgent with respect to the contribution of institutions of higher learning towards the development of population education in the African region. The first is the urgency to undertake an analysis of the existing courses to ascertain appropriate areas where population and population education content could safely and acceptably be inserted. The second need is to establish, at least, two or three Regional Training Centres in Population Education possibly in collaboration with International Agencies. These centres would undertake the responsibility of training population education graduates and/or post-graduates up to a diploma or Master of Arts degree level. In

view of language differences in the region, the centres could aim at serving the interests of three separate language groups, namely English, French and Portuguese speaking African countries.

Undoubtedly, an increased involvement of the institutions of higher learning in population education will ensure its institutionalization through the rapid building up of national capacity for its implementation. It will also heighten the awareness of both the Government authorities and the ordinary people about the importance of population factor in individual, family, community and national welfare.

THE ROLE OF INTERNATIONAL AGENCIES

International Agencies such as the Unesco, ILO, UNFPA, FAO and WHO have important roles to play as catalysts. They have a wealth of cross-cultural or global experience relating to training facilities, modalities, needs, requirements, appropriate centres and the location of appropriate experts. Upon request from the countries desiring to develop programmes in population education, the Agencies should continue to provide the usual technical and financial support. In particular, the Agencies can assist to promote the building of national capacity for; and the institutionalization process of population education, by identifying and co-operating with certain institutions of higher learning in the region to establish Regional Training Centres in Population Education. Such centres will train professional population educators up to a post-graduate or diploma level. They will conduct reseach, seminar workshops and also prepare instructional materials.

Abigail KRYSTALL and Tony JOHNSTON*

THE USE OF TECHNOLOGIES IN AFRICAN PROGRAMMES OF POPULATION EDUCATION

INTRODUCTION

In Africa south of the Sahara the most commonly expressed purpose of population education, whether in or out of school, is an improved quality of life for the individual, family, community or nation. The specific role of population education is to promote understanding of the interrelationships between population-related issues and the present and future welfare of the society at macro and micro levels. In addition population education aims at developing the skills and attitudes that help learners translate understanding into decisions and actions. Thus, important objectives of population education are fostering skills such as critical analysis, problem-solving and future planning, and attitudes such as communal concern, respect for and responsibility towards others, as well as feelings of self-confidence and efficacy.

Sub-Saharan African programmes of population education have sought to reach the following target groups or audiences:

– Planners and policy-makers, at national and sub-national levels.
– Teacher educators and teachers in pre and in-service training programmes.
– Trainers of staff who reach out-of-school youth and adults, such as literacy teachers, adult educators, youth leaders, extension agents, and service providers in the fields of health, nutrition, agriculture, community development and so forth.
– Children and youth in the formal educational system at primary, secondary and post-secondary levels.
– Out-of-school youth and adults who participate in organized and informal educational activities.
– The general public through mass educational campaigns.

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Programmes of population education (in common with all other educational endeavours) have available a wide range of technologies or media. Classified by the sensory words to which they are directed, they include:

PRIMARILY VISUAL	PRIMARILY AUDITORY	AUDITORY AND VISUAL
Non-Literacy Based	– Radio	– Human performance of plays, skits, dances instrumental music, recitation of stories and poetry
– Pictures, photographs, cartoons	– Cassette tapes	– Projected photographs on slides or film strips combined with auditory component
– Photographs projected on slides, film strips, overhead projectors		– Movies
– Boards; chalk, bulletin, flannel, billboards.		– Television
– Flip charts, posters, displays		– Video (VTR)
– Graphics: charts, graphs, maps		
– Sculpture, models, artifacts		
– Crafts		
Literacy Based		
– Written messages on any of the above		
– Texts, source books, manuals		
– Newspapers, magazines		
– Computers, word processers.		

Africa has a rich heritage of diverse educational media. Drama, song, dance and the recitation of stories and poems transmitted and promoted allegiance to the heritage, values and norms of the group. Pictorial representations, sculpture and crafts have served similar purposes among various peoples at different times. Pre-literate societies also had technologies such as the drum and the message stick for communication between geographically separated localities.

Modern technologies have broken through barriers of time and space. They record and hence give permanence. They reproduce and hence make possible the production of any number of copies desired. They transmit from one place to another throughout the world. Thus, they extend the scope of educators in all fields, including population

education. Stories broadcast on the radio or pictures in school texts can reach audiences far larger and more widespread than could the national performer or producer. Conversely, modern technologies can make distant events and issues immediate and vivid. The response of the Western world to television coverage of the famine in Ethiopia is a case in point.

At the same time, some media, most notably radio and cassette tapes, remove the communication process from its human resource. Learners hear disembodied voices and must imaginatively supply their own visualizations of not only the presented information and enacted situations but also the type (and hence the credibility) of the person who is speaking and the characteristics (and hence the relevance) of the people who are being portrayed.

CONTRIBUTION OF TECHNOLOGIES

Use of the technologies available for population education can contribute to the efficiency and effectiveness of the learning process in a variety of ways. Teaching-learning experiences can be conducted primarily through written texts, radio, films and slides, television, video, cassettes and computer programmes. In this way media help to ensure the quality of instruction. This consideration is important in view of the very recent introduction of population education in sub-Saharan Africa and its consequent shortage of teacher educators, teachers, trainers and extension staff fully conversant with the new content and practiced in inquiry and problem-solving methodologies.

Alternatively, media presentations can be components or segments of lessons and units. Diversifying the ways that information about a topic is presented increases interest, attention and comprehension. Visual and audio-visual media are frequently used to stimulate awareness. Out-of-school programmes modeled on the Freire psycho-social method use pictures, skits or songs that reflect a situation of concern to elicit participants' analysis of the causes before proceeding to develop problem-solving strategies. Visual and audio-visual media also often are employed to illustrate, clarify and reinforce written and spoken communication. Projected photographs, movies, television and video are especially effective in this regard because they can be played back or repeated, in whole or in part, for purposes of discussion, additional clarification and revision.

Perhaps the most significant contribution of visual and audio-visual media to population education is their power to stimulate visualization and imaginative comprehension, thereby increasing understanding and inducing affective change. It has been claimed that about three-quarters of the information received on a subject comes through sight, only one-eight from listening and the remainder from smell,

taste and touch (1). The adage that one picture is worth a thousand words sums up the immediacy that visual and audio-visual media can provide. Today's «picture» can be the population projections that appear on the computer screen as planners and policy-makers enter alternative assumptions during an awareness seminar. It equally well can be a planning tree assembled on a flannel board as a group of women try to identify ways to alleviate constraints to more adequate nutrition for their children, clean water for their families and the use of family planning services. (The alternatives provided by traditional and modern technologies are almost unlimited).

Few would deny the potential contribution of technologies to educational endeavours of all types, including population education. However, at present in sub-Saharan African programmes of population education, potentialities are not being fully exploited. A review of current media use in school and out-of-school reveals both overlooked possibilities and promising beginnings.

FORMAL PROGRAMMES: THE ISSUE OF DIVERSITY

Population education programmes in schools and teacher training institutions in sub-Saharan Africa seem to rely heavily on the single technology of the printed text: Lesson plans and source materials for teachers (or teacher educators), texts and workbooks for pupils (or teachers in training). It appears that planners assume that teachers and teacher educators need the written word before all else and since the role of other technologies is only supplementary, that they can be introduced gradually as time and resource permit. This assumption deserves examination. The primacy accorded the text may not be justified in terms of either effectiveness or cost.

Visual Materials

If planners of population education programmes for the formal system begin to question the somewhat automatic priority accorded to the written text, possibilities abound. One example comes from the Population Education Programme in the Republic of Somali. It has developed, produced and distributed three basic materials for the upper primary and secondary levels. One is a teachers' handbook containing background information. The second is a graded series of teachers' lesson plan books which outline main concepts and suggest teaching-learning activities. In place of pupils' texts or workbooks the programme has developed a series of wall charts for the classroom as the third basic material. The eighteen charts in the series contain visual depictions and brief written explanations of the key concepts related to the causes and consequences of rapid population growth,

rural-to-urban migration, and urban growth – the topics in the curriculum for these levels.

The charts were given priority over pupil texts because they integrate pictures with the written word and they discourage reliance on didactic methodologies. Key concepts are encapsulated visually and in brief explanatory texts; the prop of the pupil text is removed; the rest is up to the teacher. Whether used as stimulus material to motivate and initiate, or to provide the basic content of the lesson, or to summarize and review, the wall charts virtually require learners' involvement in the lesson, in projects and in activities. Additionally, the charts remain on display in the classroom, increasing the attractiveness of the learning environment, providing reminders and reinforcement for the pupils, and often reaching other (adult) audiences that use the same classroom in the evening. Finally, the cost of one set of charts per classroom is far less than the cost of a text for each pupil. This saving has been used to strengthen in-service training so that teachers can make good use of the flexibility afforded by the new media.

Audio-visual Materials

Substitutes for texts need not be printed materials. Film, slides, television and video are other alternatives which seem worth trial. The Population Education Unit of the Unesco Regional Office for Education in Africa has provided a first step in a direction that seems worth pursuing with other audio-visual technologies. The Unit has produced a package for pre and in-service teacher training consisting of a set of slides, a teachers' guide to their use entitled *The Audio Commentary* and a students' workbook that contains additional information, post-lesson exercises and suggested activities. Teacher educators receive twelve units, each consisting of two or more lessons, developed and pre-tested by experts, in which learners simultaneously receive information visually and verbally and then apply their understanding to learning tasks.

Alternatives to Written Texts

These examples suggest that the initial priority when selecting materials for population education may be to explore the possible advantages of non-text technologies and to identify the mix, or package, that best supports the programme because it is able to:

– Increase the immediacy of teaching-learning experiences through maximum use of visual and audio-visual media;

– Promote the use of teaching-learning activities and processes that enhance learners' ability to achieve desired knowledge, skill and attitude outcomes;

– Be a cost-effective investment, especially over time.

All technologies are potential substitutes for one or more of the basic written texts for teachers (or teacher educators) and pupils (or teachers in training). Information is needed concerning the extent and limits of their effectiveness, as well as their cost, so that planners of population education programmes can create instructional packages that fit the priorities and problems in each national situation.

Effectiveness Considerations

Identifying an appropriate mix or package of technologies involves trial, assessment and comparison. There is much to be learned, for example, about the effectiveness of the Somali and the Unesco innovations. The intent of the Somali approach is to give impetus to lessons designed around pupil activity and scope for teachers to adapt content and learning experiences to the needs and concerns of each particular class. Assessment can show whether – and with what degree of skill – teachers are able to make use of media such as the wall charts which give them opportunity to innovate. For example, do they try to use the charts as intended and elaborate with information elicited from the pupils, their own explanations, and investigatory, problem-solving activities? Or, do they tend to treat the charts as they would a text, reading an explanation, pointing to an illustration, and passing on to the next point? If they do try to use the charts (and by implication other media designed for similar purposes) as intended, is information accurate, are activities purposeful and are the teacher-devised learning processes meaningful and coherent? Finally, and of extreme importance, to what extent does this type of media use produce significant gains in understanding, skill development and attitude change?

There is also much to be learned from assessment of the Unesco media-based lessons and units. Packages of this type, besides integrating vision, hearing and the written word, seek to supplement the expertise of the educator by giving maximum guidance: The sequence of material, the words to be used with each slide, the activities to reinforce students' learning. Questions of effectiveness centre in the way preplanned lessons presented through the media are perceived by educators and learners at different levels.

For example, does this type of assistance stimulate and encourage the educator, or does it decrease involvement? Does it motivate greater use of class time for population education? After the initial novelty wears off, do learners react positively or negatively to pre-set explanations and instructions? Are messages given through the media over an extended period (such as the twelve units in the Unesco package) more or less credible than if given by the educator? Do the gains in expert preparation outweigh possible losses in relevance to learners' situations and adaptation to their abilities?

Cost Considerations

Cost is a major and interrelated consideration. Reliance on printed texts comes in part from the fact that the high initial expense of their development and publication is generally borne by a donor. Planners seem to assume that the recurrent costs which fall to the country itself will be minimal. Technologies that require equipment and electrical power tend to be excluded from consideration because of the recognized expense of unkeep and replacement.

These preconceptions also deserve scrutiny. Firstly, are the recurrent costs of texts really minimal? What is their life expectancy? What proportion wear out and disappear annually?

Secondly, assessing the cost of any technology or mix of technologies involves considerations other than financing initial development and upkeep. One is *use*. An apparently inexpensive technology, such as the wall charts, is costly if unused or used for only minutes per week. Information about the relationship between various technologies and the frequency and length of population education lessons is a needed input into an assessment of their cost. A second consideration is *updating and revision*. Films, slide sets and tapes can be ammended at less expense than can printed materials.

An additional consideration when assessing cost is *versatility*. An apparently expensive technology that can serve more than one function may, upon examination, prove to be more economical than a cheaper single-function technology. For example, the Unesco slide set assists teachers in training to learn the content of population education, but does not help them become more skilled practitioners.

A similar package with 16 mm films instead of slides could have served the dual functions of imparting the content *and* the methodologies of population education. Films could have conveyed the information provided by the slides and additionally contributed to the skill of prospective and practicing teachers by letting them observe master teachers in actual classroom situations (to analyse their skills) or average teachers (to analyse their strengths and weaknesses). Films also would have enabled prospective teachers to have seen first-hand the physical and interpersonal conditions in the classroom, as well as the abilities of pupils of different ages.

Finally, there is the issue of how expensive are the more sophisticated energy-based technologies? It is certainly the case that maintenance, repair and resupply of sophisticated equipment is considerable. There is no point in sub-Saharan Africa repeating the mistakes made elsewhere of «buying in» to these technologies only to have them fall into disuse because national programmes lack the financial and human resources for continuation. However, it may be possible to plan ways of using the more sophisticated energy-based technologies so as to

minimize their initial and recurrent costs. For example, with only two audio-visual vans, equipped with large screen television monitors and video tape recorders (VTR), the Population Education Programme in the Republic of Somalia is able to make available a multi-media package to in and out-of-school populations throughout the nation.

The Somali use of VTR illustrates some of the previous points. One objective of the programme is to develop and distribute a wide variety of media resources to support the introduction of population education in schools (primary and secondary), out-of-school settings and institutions that train teachers and extension workers. The programme considered two options. First, the more common approach of developing, insofar as resources permitted, a set of media materials for each type of population education programme. Analysis showed that utilizing 16 mm film, film strips, slides, material for overhead projectors and cassettes, together with other visual aids such as charts, flannel graphs and models, would be extremely costly and cumbersome in terms of initial set-up and on-going use. Desiring to make available extensive multi-media support, the programme developed the innovative and far less expensive strategy of putting all these materials onto VTR.

Transferring all other media onto VTR has proved to have the following advantages. It reduces to two easily operated pieces the equipment required to present all media material. In addition, this option has the advantages of message standardization *and* adaptability to the educational situation. Presentations can be stopped, started or repeated at will. Pictures can be «pause frozen» for teacher exposition, or the sound can be diminished for extemporaneous teacher commentary. Finally, the manner of distribution ensures coverage of the target audiences and high levels of participation. The two audio-visual vans cover the country, region by region, beginning with the capital city of a region and then proceeding outwards to the rural areas. During the day, showings are primarily for school children and in the evenings for adult audiences. Evening presentations have become village events – children return, and families of participants in out-of-school programmes attend.

NON-FOMAL PROGRAMMES: THE ISSUE OF RELEVANCE

Because adults with little or no education are the main targets, out-of-school programmes of population education have tended to rely primarily on visual technologies. Posters and calendars have been used to bring population-related messages into public buildings and homes. Considerable use has been made of flip charts, magnetic boards and flannel boards to illustrate concepts and to serve as planning tools. Pictures and picture story books have been popular stimulus materials to promote involvement and initiate discussion and analysis.

To date in sub-Saharan Africa, audio and audio-visual media seem to have played a minor role in most out-of-school population education programmes, especially those that are not institution based. One exception is the pilot activity, Group Listening Forums, initiated by the FAO population education project, Programmes for Better Family Living (PBFL) that operated in Kenya between 1972-1977. The Listening Forums were developed in response to the shortage of extension staff in rural areas and women's needs for information related to improve economic and social welfare. The intent of the Listening Forums was to enable women's groups to learn, on their own, through taped lessons played on cassette recorders. The advantage of this technology were perceived (and subsequently confirmed by evaluation) as including (2):

– Ease of operation, durability and low cost of the equipment.
– Low cost and comparative simplicity of producing taped lessons, making it possible for local extension workers to develop lessons in response to specific identified needs.
– Convenience for members since group meetings could be arranged at times appropriate to the women's schedules.
– Accurate transmission of information and adequate comprehension because lessons or parts of lessons could be repeated as any times as required by group members.

Although not lacking in diversity, the media materials developed by out-of-school programmes in sub-Sahara Africa generally lack sufficient relevance to effectively influence participants' attitudes and behaviour. Relevance requires adequate localization, incorporation of people's concerns and inclusion of the all-important step of pre-testing materials.

Localization

Visual material loses its power to influence people's attitudes and action if they are unable to identify with what they see. This is shown by reactions during the field testing of posters that were produced by an international organization for use throughout Africa south of Sahara. The posters dealt with various aspects of child care during the first twelve months of a baby's life and used as models women and children from one particular locality. Although found convincing in that place, in other parts of Africa their message was rejected. Typical comments included: «Breastfeeding may work for those mothers (the ones illustrated), but not for us». «Those babies may need vaccinations, but ours are different – they don't even look like them».

What constitutes adequate visual localization will vary by country. The greater the heterogeneity of ethnic groups and livelihood systems, the greater the need for sub-national adaptation. The need for visual

images that apply to the audience to which they are addressed is particularly acute with population-related issues which are novel, sensitive or controversial. Part of the task of pre-testing materials is to determine the extent to which the intended viewers are able to identify with depicted people and situations.

In some places adequate localization may have a linguistic dimension. Even when people understand the national language, they often prefer to hear or read, and give greater assent to words in their own tongue. One of the important features of the Group Listening Forums was that the taped lessons were recorded in the local language of each district in which the programme operated. As with visual media, pre-testing is required to determine whether or not the cost of linguistic localization is justified by the gain in credibility and impact.

People's Concerns

The potential of media to educate is only fully exploited when the materials speak (visually or verbally) to identified concerns of specific target groups. Although there are notable exceptions, a majority of the media materials developed by out-of-school population education programmes seem too general to communicate effectively and induce affective or behavioural change. To return once again to the Group Listening Forums this activity provides an example of the preparatory work required to ensure that population-related issues are introduced in connection with concepts of concern to the intended audience. The lessons prepared by the extension agents for use by the women's groups were developed only after the needs and priorities of members had been identified through community surveys. Pre-design surveys of this type need not be elaborate. Often a series of focussed discussions will elicit sufficient information about the issues and problems that touch intended target groups most deeply.

Basing materials on issues of relevance to specific target groups is only part of the task when the educational intent is behaviour change. The resources devoted to media materials and presentations in out-of-school programmes are largely wasted when it is assumed that «people's ignorance» is the main problem and that once people are informed of the reasons for or benefits of adopting recommended practises, action will automatically follow. Although materials must convey (through sight or sound) the rationale for recommended practices – the reasons for or benefits of adoption – they also must deal with the factors – values, beliefs of lack of resources (including time) – that constrain people's action. These constraining factors often are in fact people's real concerns. Unless they are given attention and incorporated into materials, the impact of any type of media is likely to be minimal.

In common with all other types of development education, preparation of relevant media materials for out-of-school programmes of population education requires that designers can provide specific and detailed answers to the following types of questions (3):
– What is the intended or«target» audience of this media material? Who is it aimed at? What age group, sex, socio-economic group, language group is the material intended for?
– What is the main objective of the media material? What should members of the intended audience do as a result of the material? How do you want them to react? In what ways are the material asking them to change their behaviour?
– Why are members of the intended audience not already doing what the material suggests they should do?
– What economic factors are there that might make them less likely to do what the material suggests?
– What does the audience already know about the topic of the material?
– What are their feelings and emotions towards the topic?
– What else should you know about the intended audience of the material?

Pre-Testing

Pre-testing is the process of determining the overall relevance of media materials for an intended audience. Relevance is a composite of the following factors, each of which needs assessment during pre-testing:
– Sufficient localization so that the intended audience feel that the materials are about and intended specifically for them.
– Clear relationship to issues, problems and needs which are of deep concern to the intended audience.
– Direct, unambiguous communication through use of visual/verbal elements and a central focus, theme or message that are easily and correctly recognized and understood by the intended audience.
– Absence of any elements that would offend the intended audience.
– Ability to attract and maintain the attention of the intended audience.

There are available a wide variety of examples of pre-test questionnaires. One developed by Dr. Robert Linney, appears at the end of the article. It could easily be adapted for pre-tests of other types of media and for use in a group discussion situation.

FORMAL AND NON-FORMAL PROGRAMMES: THE ISSUE OF UTILIZING AVAILABLE RESOURCES

By and large programmes of population education – whether in or out-of-school – have tended to rely on experts based in curriculum

and media units to develop texts, visual and audio-visual materials. The assumption that educational media must be produced by educational experts has caused planners to make minimal use of other strategies, such as enabling users to produce their own media or involving professional artists, actors and writers in the production process. The following examples suggest the advantages in terms of educational impact, quality and cost that could be obtained through more innovative approaches to the development of media materials in population education programmes.

Users as Producers

The population Education Programme in the Republic of Somalia has emphasized the importance of involving teachers and pupils in the development of their own educational media. Through in-service training and a publication entitled *Learning to Do: Low-Cost Visual Aids for Somali Teachers*, educators learn about easily made aids that can be produced at little or no cost from readily available materials. They thus are able on their own to add a visual dimension to instruction in order to illustrate concepts and relationships. In addition, teachers are encouraged and shown how to work together with pupils to develop displays, posters, wall charts and even film strips (a series of pictures on wide strips of paper, wound from one stick to another, accompanied by verbal commentary or dialogue). Involving pupils in the production process is an important type of learning experience, especially when they are asked to devise their own ways of illustrating information and ideas. As noted by the Somali programme, pupils' motivation, interest and understanding are increased still further when they have opportunities to *use* the materials they have made to educate others – classmates, younger pupils and their own families.

Field workers and extension staff can and have similarly developed their own teaching aids from local materials. Two examples are given of more ambitious media production activities involving fieldworkers. One comes from the PBFL experience in Kenya. An objective of this programme was to promote integration between extension staff of the various sectors that educate and provide services to rural families. Following an orientation workshop, fieldworkers in one district expressed the need for educational materials that would reflect and support their new interdepartmental approach. Instead of developing these materials *for* field staff, the programme assisted a team of district officers from agriculture, health, nutrition, home economics, family planning, community development and adult education to formulate a series of lessons that they (and sub-district staff) could use. The key elements in the process are summarized in the following list. On the one hand, this process is evidence of the frequently ignored capability of local

extension staff. On the other, it is a guide to the steps required to produce relevant media of any type so as to increase the impact of population education materials (4).

Step 1. Fieldworkers designed and implemented surveys in various communities to identify the problems of concern, topics about which information and education were desired, and the social, educational and economic situation of intended target groups.
Step 2. Fieldworkers analyzed the surveys, identified and defined the problems of greatest concern.
Step 3. Fieldworkers and resource personnel participated in a writing workshop to prepare lesson notes and lesson outlines. Preparation of each lesson included group consideration of the following issues:
– For whom is the lesson intended? What characteristics are important to consider?
– What specific issue or problem of concern to the intended audience is the reason for the lesson?
– What information is needed by the audience (e.g. the origin, causes, indicators and effects of the problem as well as actions that provide effective solutions)?
– What local conditions affect the audience's ability to use the information and recommendations? What kinds of problems will the audience encounter if it tries to put recommendations into practice?
– What is the best way to solicit information and suggestions from the audience about the problem and proposed solutions?
– What questions and activities will achieve audience participation?
– What equipment and teaching aids would help increase understanding and adoption of effective action plans?
Step 4. Subject matter and adult education specialists checked the lesson notes for content accuracy and language style, simplicity and clarity.
Step 5. The revised lesson notes were field-tested and evaluated by the fieldworkers themselves.
Step 6. After further revision the lessons were grouped in a manual and again field-tested and evaluated by groups of fieldworkers.

The second example comes from outside sub-Saharan Africa. It has been included because it shows that fieldworkers can design effective visual materials and describes a simple low-cost technology for local mass production.

> There must be millions of posters in developing countries. A large number of these posters, possibly the majority, fail to communicate their intended messages to their intended audience. Some posters don't work because they are produced at a distance from

where they will be used. A poster for use in a rural area is made in a town and designed by someone with a very different socio-economic background from the people for whom its message is intended. In February and March 1984, Ken Haharg and I conducted four poster workshops in India. The participants included village level health workers, a few government artists, representatives from voluntary health associations, a group of nutrition and child development trainers and in one case a group of undergraduate art students. Apart from these art students and the government artists, none of the participants had much experience of drawing or printing.

The main aims of the workshops were four-fold. First, we wanted to convince health workers that you do not need to be an artist to produce a poster that works. The second aim was to teach a low-cost method of silkscreen printing in which stencils are made by painting a water-soluble filler onto the screen. Screens and printing tables can usually be made from locally available wood together with some screws and hinges. Screen-filler can be made using glue diluted with water, to which a little pigment such as powder paint can be added to make the otherwise translucent glue more visible on the screen.

Most participants printed 3–5 colours and produced 20 or so copies of their posters. Every participant (about 50 in all) managed to produce a finished poster. Nearly all of them enjoyed doing so. The sense of satisfaction at seeing something you have designed yourself reproduced in multiple, discovery of a new skill, realizing the potential of being in control (at least to some extent) of the means of producing printed material – all contribute to one of the most important features of this approach.

Our third aim was to teach the necessity of the designer carefully specifying the intended audience for his or her poster. Lastly, we wanted to emphasize and demonstrate how important it is to test a poster design by finding out what it means to members of its intended audience. Participants conducted 10–15 interviews for each design tested. Some communicated well, some badly. About 65% of the people got the basic message from the 26 posters that were field tested. Given that the designs were first drafts, I think this strategy was successful. The realization of the individual health workers' potential as a one-person poster production unit vastly outweighs any disadvantages that may have arisen from the lack of sophisticated drawing skills (5).

These examples suggest an option for planners of population education programmes. Resources (of finance and specialist personnel) which heretofore have been used to develop media at regional and na-

tional levels might instead be used to assist local staff to produce the materials they will use in their own areas. The process not only generates materials of greater relevance but also contributes to the professional development of the fieldworkers themselves. They learn more about the people and problems in the areas where they work. They are challenged to explain the various dimensions of these problems so as to ensure that the actions and practices they recommend take into account local conditions, resources and constraints. They discover and make use of new skills. In the process their function is upgraded «from being merely a linkage between sources of information and rural families to becoming generators and producers of information. Their function becomes more dynamic and can always be refreshed by the new materials which they want to develop» (6).

Professionals As Producers

In and out-of-school population education programmes, in common with other educational programmes, rarely make use of the wealth of professional talent – often un or underemployed – that exists in every nation in sub-Saharan Africa. Experience, again from Kenya, suggests that professionals are willing and often extremely eager to participate in public programmes and that this participation can improve the quality and increase the effectiveness of educational media.

Through the Family Planning Private Seçtor Programme (FPPS), the Kenya National Council on Population and Development has involved artists and actors in the development of educational media. To respond to the need for posters to support information-education activities, FPPS turned to fifteen artists of national repute. In less than two months, at a cost of under 6000 dollars, the artists produced over 60 drawings and paintings – most of them striking and highly innovative – which are now ready for field testing. The activities undertaken to date include:

Planning Workshop

Representatives of government and non-government organizations involved in population-family planning in Kenya met for two days to identify specific target audience for the posters and the population concepts related to development issues (food, housing, education, employment, land, health, nutrition) of relevance to each audience. Concepts were translated whenever possible into themes and messages to be incorporated into posters.

Artists' Orientation Workshop

During a one-day orientation workshop, the 15 artists were given information on Kenya's population situation, the programme and the

uses of the posters. The artists examined examples of population posters from Kenya and other countries in Africa. They next considered the themes and messages which had been developed during the planning workshop. Finally they prepared and discussed preliminary sketches of posters illustrating some of these ideas.

Artists' Initial Review Workshop

Three weeks later the artists reassembled with an average of four finished drawings and paintings per artist. Each artist showed and explained his or her material. In many cases, amendments suggested by the group have resulted in additional designs.

Field testing, which is about to commence, will seek to determine:
– The clarity and understanding of the overall poster, and of each visual and verbal element.
– Whether, in some localities, it is necessary to change aspects of the drawings (such as people's appearance or apparel) for greater effectiveness.
– Additional concepts, themes and messages for the intended audiences which can be used for other visual materials produced at a later date.
– How extension staff can make most effective use of the posters as stimulus material for group discussions.

After suitable revision, the best 10–15 posters will be produced for distribution. Various spin-offs are anticipated. One is an exhibition. Another is the use of the drawings and paintings for a calendar and for cards.

Learning of the need for other types of media presentations to support information-education activities, a group of actors from the Voice of Kenya Television Service volunteered to produce and present skits on population-family planning issues. The group of actors have written two original dramas which are currently being rehearsed. They will travel to factories and plantations. In each place, they will give two performances and lead a discussion with the audience after every performance. Because the actors wish to work at no cost as a public service, expenses for this undoubtedly extremely popular activity will be confined to transport, actors' food and lodging.

The final example of use of available talent comes from Youth Education Programme of the Community Health Department, Chogoria Hospital, Meru, Kenya. The programme trains teachers and youth group leaders to introduce population-family life education into school and out-of-school contexts. The programme wanted to provide its trainees with educational materials that would increase their motivation and confidence, and thereby help to ensure that they would in fact initiate educational activities on population-family life

concerns. It turned to a national magazine, *Viva*, whose back issues contained a wide range of relevant articles on subjects such as the consequences of teenage pregnancies, breastfeeding, aspects of health and hygiene, care of infants and young children and Kenya's population situation. The magazine allowed the programme free use of texts and illustrations and permitted revisions to shorten, simplify and adapt written material for the target audience. The result is an attractive 32-page magazine which will be distributed to young people in all schools and youth groups participating in the programme and through them reach the other members of their families.

The only cost to the programme for this unique educational material which has the potential to reach the entire population in the hospital's catchment area was for paper and printing.

Traditional dancers, singers and story tellers are another group who can contribute to in-school and out-of-school programmes of population education. To date the value of traditional and folk media to communicate population-related themes and messages seems to have been largely overlooked in sub-Saharan Africa.

A FINAL NOTE

There is much that needs be done in sub-Saharan Africa at a regional level to increase the diversity of technologies, relevance of materials and innovative use of resources in programmes of population education. One major contribution would be for the two regional offices to systemically collect and disseminate all population-related materials developed and used at national and sub-national levels. A second type of needed upstepping is training for population educators in media use, maintenance and servicing of the more sophisticated equipment, and in low-cost technologies for the production of visual and audio-visual materials at the local level. A third is that of initiating and supporting trial, assessment and comparisons of various technologies and media packages in different contexts. Finally, regional offices could usefully address themselves to identifying effective ways of training and assisting users to become producers of their own materials. In these ways, the regional offices can help turn some of the promising beginnings into prevailing practises in programmes of population education in sub-Saharan Africa.

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(1) Shawki Barghouti. *Reaching Rural Families in East Africa*. Programmes for Better Family Living, Report 1. Nairobi, Kenya, FAO, 1973, p. 87.

(2) Based on material in: T.H. Gatara and George Nzomo. *Listening Forums: A Communications Approach to Rural Development*. Programmes for Better Family Living, Report 30. Nairobi, Kenya. r.d.

(3) These questions have been adapted from a series of ten questions for poster designers developed by Dr. Robert Linney whose work in India was described earlier in this article. They appeared in Dr. Linney's report, Designing and Testing Posters for Health Education, (mimeo) which can be obtained from him at X3 POSTERS, 32 Charlotte Road, London, EC2, UK (Tel: 01-739-5352) or Holly Tree Farm, Walpole, Halesworth, Suffolk, UK (Tel: 098-684-402).

(4) Based on material in: Shawki Banghouti. *Integrated Functional Education in Machakos District: The Introduction of Population Education into Rural Extension Services*. Programmes for Better Family Living, Nairobi, 1974.

(5) Quoted from the report prepared by Dr. Robert Linney, *Poster Works for Health Workers*, mimeo, passim. A complete copy of the report may be obtained from Dr. Linney at the above address.

(6) *Integrated Functional Education in Machakos District*, op. cit.

ANNEX

SAMPLE QUESTIONNAIRE FOR PRE-TESTING POSTERS

1 –What do you see in this poster?
2 –Do you think that this poster is asking you to do anything in particular? If yes, what?
3 –Please tell me in your own words what is the message of this poster.
4 –Do the people on the poster remind you of your friends or are they different from your friends? If different, in what way?
5 –Does the ... on the poster look like yours or does it look different? If different, in what way?
6 –Is there anything on the poster which bothers you or might offend your friends and neighbours? If yes, what?
7 –Is there anything in particular that you like about this poster? If yes, what?
8 –Is there anything in particular that you dislike about this poster? If yes, what?

Now read the words on the poster to the respondent, and then ask the following questions:

9 –Can you find anything on this poster that is not clear? If yes, what?
10–Is there anything we forgot to put on the poster? If yes, what?
11–Does the poster say anything that you do not believe is true? If yes, what?
12–What do you think could be done to make this a better poster? If you are testing more than one poster with the same (or similar) message, ask questions 13 and 14. If you are testing only one poster do not ask questions 13 and 14 but proceed to question 15 – 23.
13–Please look again at the posters, this time together. Which one do you like best? 1... 2... 3... Why?
14–Which poster do you like least? 1... 2... 3... Why?
15–How old are you?
16–Male ... Female ...
17–What is your religion?
18–What is your current employment?
19–How many children do you have?
20–Can you read all the words on the poster? Yes... No...
21–Which language do you use at home?
22–Which written language is used mostly in your area?
23–What do you think are the best places for posters to be displayed in your area?

Questions 1, 2, 3, 9, 10, 12 test for *clarity* and *understanding*. They tell us if the respondent sees the words and pictures clearly and if he/she can understand what the verbal and visual messages are intended to be.

Questions 4 and 5 test for *relevance*. They tell us if the respondent feels that the poster relates to him/herself or if he/she feels that it is only intended for other people.

Questions 6 and 11 test for *acceptability*. They tell us if the respondent finds the poster acceptable or whether he/she finds the content of the poster offensive, untrue or otherwise unacceptable.

Questions 7 and 8 test for *attractiveness*. They tell us if the respondent finds the poster attractive, interesting and pleasant to look at or if he/she dislikes the appearance of the poster.

Alfred O. UKAEGBU*

THE TEACHING OF POPULATION AND FAMILY LIFE EDUCATION

Quite often one hears some educators expressing concern about how to teach the subject of population/family life education. Probe this concern, and you are likely to come up with replies like: «The teachers feel ill at ease to teach the sensitive concepts to the children». They feel embarrassed to answer pupils' questions... etc. What then is wrong, and what can be done?

The truth is that the contents of population/family life education challenge the resourcefulness of the teacher. The subject is both problem-oriented and value-laden. The teacher who is proficient in the application of the lecture or exposition method of teaching suddenly finds out that this method is not appropriate for a number of the topics he has to handle. Therefore, he has to try other teaching methods.

The experience of many countries in Asia, Latin America, the Arab Region, and Africa South of Sahara has shown the inquiry/discovery learning method is more effective in teaching population/family life education than the other traditional methods. The inquiry/discovery method is another name for the inductive method. It is, therefore, not new. It is appropriate for the acquisition and retention of knowledge of population/family life issues; for the development of thinking and analytical skills in population matters; and in developing desirable population – related attitudes.

PREREQUISITIONS FOR TEACHER PREPARATION

As in other training activities for teachers, effective teacher preparation would ensure that the following background materials are handy:

– A curriculum outline in population/family life education;
– A teaching syllabus;

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– A teacher's manual;
– Pupils' textbooks.

In addition, appropriate training strategies for teachers, (especially serving teachers) should have been worked out – whether face-to-face; distance/correspondence; the use of self learning modules, etc. Similarly, innovative teaching techniques, such as the use of multi-media, independent learning and group process, should have been developed. The teacher will be familiar with, and will be able to decide when to use one or more of the following techniques – role playing, simulation, interaction analysis, debates, drama, guest lecturers, excursions, assignments, values clarification, etc...

He will adopt a value – fair approach when presenting a topic, and will be non-prescriptive in the generalizations and conclusions. He will use as much visual aids as possible and will emphasize learning experiences by involving the pupils as much as possible.

Let us illustrate some of these principles by reference to:
– The inquiry method;
– Values clarification; and
– Role playing.

The Inquiry Method

The inquiry or inductive method uses scientific steps as follows:
– Problem definition;
– Formulation of hypotheses (tentative answers);
– Data collection, analysis and generalization (or applying the conclusion).

Lesson: The relationship between Population Growth and Socio-Economic development.

Objectives: – To recognize that rapid population growth tends to slow down socio-economic development;
– To recognize that planned population growth tends to promote socio-economic development;
– To understand that population growth and socio-economic development are interactive variables, either can in some ways influence the other positively or negatively;
– To acquire process skills in gathering, analysing and interpreting data.

Grade Level : High School
Subject : Social Studies
Duration : Three Lesson periods.

Introducing the Lesson

The students have been acquainted with such basic concepts as population growth rates, gross national product per capita, total ferti-

lity rate, age dependency ratios, life expectancy at birth, doubling time of the population. Review these concepts again.

Step 1 : Define the problem

Present two conflicting views concerning the relationship between population growth and socio-economic development. ... «It is said that population growth can stimulate economic progress in that such growth increases the demand for goods and services; and that increased demand may lead to increased investments for further economic growth. On the other hand, it is also said that population growth may slow socio-economic growth because it reduces the resources available to the people for investment...».

This is a puzzle. What is the precise problem? How can we state it clearly and briefly? Guide the students to suggest statements of the problem: e.g. How does population growth affect socio-economic development? How do we know that the problem has been clearly stated? In this case, the problem is precise and researchable. It shows a relationship between two variables – population growth (an independent variable or that which causes change in another variable), and socio-economic development – (the dependent variable or that which is changed by another variable).

Step 2 : Formulate hypotheses

Formulating hypothesis involves making intelligent guesses at solutions to the problem on the basis of the students' previous experience or currently available information. Well-stated hypothesis can usefully guide data collection in that they can delimit the initial objective of the research process.

Guide the students to state hypothesis such as:

– Rapid population growth tends to slow down socio-economic development;

– Planned population growth tends to promote socio-economic development.

Both hypotheses present an «if....then» proposition, indicating that if certain conditions (in this case, rapid/planned population growth) occur then slowing down/promotion of socio-economic development is to be expected. The students should note the use of the words «tends to». This is preferred to using the emphatic statements «slow down» and «promote» because in social science inquiry, no absolute and conclusive results are expected.

Step 3 : Collect relevant data

Guide the students to decide on the kind of data and how best to gather it cost-effectively and timely. From the statement of the hypotheses we need two sets of data:

– The evidence that socio-economic development has been slowed down in countries with rapid population growth (2 per-cent and above);
– The evidence that socio-economic development has occurred in countries where population growth is planned.

Guide the students to select from one of the following ways of gathering data – observation, interview, questionnaire, case studies, documentary analysis, artifacts, etc. For the above hypothesis documentary analysis might be most appropriate. The following Tables 1 and 2 compiled mainly from the World Bank and UNFPA sources might be useful for testing the hypothesis.

Step 4 : Test the hypothesis/Analyse the data

Let us make two assumptions:
– That the GNP per capita is a measure of socio-economic development of a country; and
– That the indicators of the socio-economic condition of a country will include its total fertility rate, age dependency ratio, index of food production per capita, life expectancy at birth, and the estimated doubling time of its base year population.

Guide the students to summarize the information contained in Tables 1 and 2, bringing out their main patterns. For example:
(a) All the 15 African countries, regardless of their population size, recorded rapid population growth rates between 1970 and 1982;
(b) During the same period, all the Industrial Market Economies (Western Capitalist Developed Countries) had very low population growth rates;
(c) By 1982 the GNP per capita of all the 15 African countries was very low as compared to very high GNP per capita of all the Industrial Market Economies;
(d) Between 1960 and 1982 the GNP per capita average annual growth rates of most of the 15 African countries either declined or stagnated while those of the Industrial Market Economies grew significantly;
(e) All the 15 African countries with rapid population growth rates recorded large family sizes, high age dependency ratios, decreased food production between 1980 and 1982 when compared with their production from 1969–1971; low life expectancy; and their total population sizes would be expected to double between 2000 and 2017 AD;
(f) On the other hand, all the developed (Western) Industrial countries recorded very low family size, below replacement level; low age dependency ratios; increased food production; very high life expectancy; and one century of estimated doubling period of their total population.

Step 5 : Draw Conclusions

Drawing conclusions involves discovering meaningful patterns of relationships among informational data derived from the observations, analysis, etc. The expected relationships are often explicit in the hypotheses. If the hypotheses are not confirmed, then new formulations are made. But if they are confirmed, then the conclusion will be a mere re-statement of the hypothesis, namely;

– Rapid population growth tends to slow down socio-economic development; and

– Planned population growth tends to promote socio-economic development.

Step 6 : Generalize or Apply the Conclusion

There are two basic components of generalization:

(a) Testing the conclusion against new evidence; and

(b) Generalizing about the results.

Guide the students to examine the conclusions carefully. If they are perceptive enough, or through the teacher's prodding let them consider if:

– Socio-economic development could be an independent variable which tends to reduce population growth;

– Other constraints (natural: (e.g. – poor climate, soil, drought) and external (e.g. unfavourable trade balance) could have interacted in some complex way with rapid population growth to slow down socio-economic development.

If the available data support these hypotheses, then the generalisation may be stated as follows:

The relationship between population growth and socio-economic development is a complex one; both are interactive variables; in some ways they can slow or accelerate each other, but always within the context of other intervening variables.

Values Clarification

There are 3 levels of teaching namely (i) the *facts* level (ii) *concepts* level and (iii) *values* level. The facts level uses mainly exposition-oriented methods. Here the main objective is the teaching and learning of specific facts or information.

The concepts level uses the inquiry method described in Section I above. Here the objective is to enable the learners discover interrelationships among items of factual information and to make relevant generalizations.

The values level uses the clarification approach. The objective is to enable the learners to explore the connection between the subject matter and their own feelings, attitudes and behaviour.

Recapitulation

Recall the generalization arrived at in the last lesson. Then ask: «What does this generalization have to do with the students? Can students individually contribute to a national plan of population growth which will promote socio-economic development»?

Help the students see how they can do this by considering the generalization at the micro level (i.e. family or community level). Let them, for example, consider the advantages and disadvantages of the large versus small family size in relation to the socio-economic well-being or quality of life of their families.

Adopting the group discussion techniques, drill the students through the values clarification model developed by Raths and his associates (1). This model consists of 7 steps which the students need to go through before it can be claimed that learners have clarified or derived their values. These are:

Choosing	1. freely
	2. from alternatives
	3. after thoughtful consideration of the consequences of each alternative
Prizing	4. cherishing, being happy with the choice
	5. willing to affirm the choice publicly
Acting	6. doing something with the choices
	7. repeatedly in some patterns of life.

Let us illustrate how the Raths' model may be used in values clarification:

1 – Choose freely

To a large extent in most societies, childbearing is the outcome of free choices since most births occur within marriage. With modern medical science couples can now choose whether or not, and when to have a child, or the best number of children to have. Death may be beyond their choice, but not certainly birth or even pregnancy.

(1) Raths, Louis, et al, 1966. *Values and Teaching Working with Values in Classroom* (Ihio, Charles Merril).

2 –Choose from alternatives

Let the students outline and choose from conflicting values for large versus small family size as suggested below:

Rationalization for:

Large family size	Small family size
1. Health Values	
Children often die	Family Health is insured
Since this is the case, it is necessary to have many children to ensure that some will survive to inherit family property.	The mother's health is preserved. Father need not work very hard to provide more than enough for the family.
2. Economic Values	
Economic asset and security for old ages	Higher standard of living
Children are economic assets and social security for old age	Living expenses are less in small family. Family can save to buy all comforts in life and for enjoyment of recreation.
3. Family Welfare Values	
Large families are educative and happy	Better child rearing and little tension in the family
The larger the family the more chances to learn from one another Also large families are happy families.	Children are treasured and reared better. Little or no tension arising from insufficient resources to care for the family.
4. Personality – Related Values	
Ego Support	Self actualized
The more the children the more the husband is able to show	The less the number, the more likely will they realize their am-

virility and manliness. The more children the more a wife secures her position in the husband's home.	bitions. The less the children the more the wife is able to have time to work and earn income outside the home.

5. Social Values

Attributes of status and prestige	It is quality and not quantity that counts
Parents who have many children have a high status and prestige in the local community. Such families have respect, and are feared by other smaller ones.	A small family of two or three well educated children is more useful to society, than that with ten or more illiterate or little educated children. Parents of such large families are likely to add to social problems.

6. Moral Values

God's will	Moral irresponsibility
Large families are God's blessings. Children are God's gifts not given to all who need them.	A person who has more children than he can decently bring up is morally irresponsible.

7. Religious Values

Obedience to religious injunction	Obedience to religious injunction
My religion says that we should increase and multiply. Large families are keeping this injunction.	My religion urges the responsibility of parents to children's upbringing. Parents who have small families which they can look after have not offended the religious injunction.

3 – Choosing after thoughtful consideration of consequences

The advantage of values clarification is that it allows learners to use both rational thinking and emotional awareness in examining human behaviour. The learners are led into the consequences of the choices of each of the alternatives, with reference to their own lives.

Among the questions that each learner may ask himself would include the following:

Choice of a large family	Choice of a small family
1. Health Values	
How will it affect the health of my wife, myself, our children?	If I have only one or two children what will happen if one or both should die? Who will survive me, will my child be an only child?
2. Economic Values	
Can I afford it? Can I provide adequate food, clothing, education, give them a bright future?	Who will take care of my wife and I in old age if these few children are not there? Who will help in the farm/or in my business?
3. Personality-related Values	
Must I have many children simply to prove that I am virile, a real man? Are there no other alternative basis of status and security for my wife other than childbearing?	What will people think of me if I have only one or two children? Will they say that I am weak or simply stingy. Must my wife work outside the home to support the family?
4. Religious/Moral Values	
Will God really help me provide for all the children by which he will bless my marriage?	Will God punish me for adopting family planning?
5. Social Values	
In modern society, what are the real status symbols today?	Will a small family size really help me, my community and nation to build adequate human resource for socio-economic development?

4 – Prizing and Cherishing

Values do not only include rational choices, but feelings as well. When feelings are added to ones rationalization of fertility-related values, then one becomes fully aware of what one prizes and cherishes. It becomes part of what one thinks is worthwhile and important.

5 – Publicly affirming

If one considers a value important, such as the preference for small family size, then he/she will not be ashamed to talk about it publicly, not only to help clarify their own values, but more importantly to help others clarify their own fertility-related values as well. Like a good missionary, he/she will strive to disseminate the value to as many people as possible.

6 – Acting

«The sweetness of the pudding is in the eating» so goes an adage. Sections 1–5 are merely concerned with attitude formation and/or modification. Family planning experiences show that there is always a gap between knowledge, attitude and practice. Assuming that most learners chose the small family size norm, it is only when they get married that they can prove if, in fact, they have internalized that small family size norm.

7 – Patterns of Life

Fertility-related values are not and should not be independently reflected and derived. They must be part of the overall development goals of the families, communities and nations – as part of the overall pattern of life of the people. This should also be the ultimate goal of population education.

Role Playing

Lesson: Preference for a son: Socio-cultural values affecting population change.
Objectives: – To show why the preference for sons persists among African families;
– To state what arguments could be used to dissuade parents from the strong preference for sons;
– To reflect value positions regarding preference for a son through role-playing.
Grade level : High School
Subject: Social Studies
Teaching Strategy: Role Playing.

For the teacher: Fannie Shaftel (2) defined role-playing as «the spontaneous practice of roles – assuming them in order to practice the behaviour required in various cultural situations». Role playing involves an elarobate socio-cultural method. It is not merely a technique of teaching: it is a group problem-solving method which involves, among other things, decision-making, discussion, problem analysis and generalization. The Shaftels identified seven steps in role-playing. We shall apply these steps in the study of African preference for sons.

1 – Set a Climate for role playing

(a) The preference for sons appears to be prevalent in many developing countries of Asia and Africa. Under the one-child policy of China, reports say that some spouses who verify that a pregnancy would result in a female birth try to terminate such pregnancies through induced abortion. Studies on the value of children found that one-third of Philippines families, and nearly one half of Thai families try, no matter how many daughters they have, until they have at least, one son.

In the African countries, studies also show that some families, no matter the level of their education or economic status and no matter the number of daughters they have, try to have, at least, a son before they can stop having additional children.

(b) *Question*: What is the situation in this country regarding this value? Do you know of some families that have behaved this way?

(c) Now, listen to this unfinished story:

Mugo and John became good friends many years ago when they attended a village primary school in one African country. They went to the same secondary school in the province. Before completing their secondary education they fell in love with two female students in a neighbouring provincial secondary school. These girls were Ola and Mary. Mugo took up a job as a bank clerk with a city bank soon after his secondary education, and two years later he got married to Ola. But John went further to receive University education in Science. So did Mary in Arts Education. John and Mary got married at the end of their university education, that is, three years after his friend Mugo had been married. John and his wife Mary took up jobs in another provincial city 2000 kilometers away from Mugo and Ola. Mugo made a rapid progress in his job and in a matter of years he was promoted to

(2) Fannie R. Shaftel and George Shaftel, *Role Playing for Social Values*, New Jersey (Prentice Hall), 1967.

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a supervisor. However, both families became engrossed with their jobs and family affairs so that from 1970 to 1982 they did not hear from each other.

By 1982 Mugo and Ola had five children, all females. They are determined to have one or two sons, but so far only daughters have come. Because Mugo is only a bank supervisor with many children and living in an expensive city, the family is not well-off. Inspite of their trying to make both ends meet, life is tough for the family, and the husband and wife look much older than their ages.

John and Mary have a son and a daughter, and they do not intend to have any more. They are well-off and are enjoying life. Both look much younger than their ages.

In August 1982 the two families met at an Alumni Association meeting of their former secondary school. Mugo and Ola took John and Mary to their home to stay the evening together. John and Mary noticed their friends' conditions and desire for a son. They thought that Mugo and Ola had a problem.

Questions: What do you think John and Mary will say? If John and Mary should try to dissuade Mugo and Ola about their determination to have a son, how will they react. What do you think will happen when the problem is discussed?

Note: Guide the students to think of «what will happen» rather than «what should happen». Allow the «should» aspect to emerge from the groups growing insight as they role-play the situation.

2 – Select role-players

Before selecting the role-players, the teacher asks other «warm-up» questions to enable him select students who seem to be identifying with the roles in the situation, or with the situation. For example, where will this discussion take place? Who else will be present? Where will Mugo's and Ola's daughters be at the time? What kind of introductory discussion will take place? How do you think Mugo and Ola will react if the issue is raised? What will happen now?

3 – Prepare the audience (as participant observers)

The teacher prepares the audience to observe purposefully. He may suggest to the observers that:
– Some identify with particular roles and think through whether that would be the way they would play them.
– They check the performance in terms of how realistic it is.

– They observe how different people in the enactment feel in the situation.
– They think through the solution (or technique) that is being demonstrated for other possible solutions.

4 –The enactment

Let the role players carry out the enactment. The teacher stops it when the role-players clearly demonstrate their ideas on what will happen. Sometimes, he may allow a situation to be played out to the bitter end so that the consequences become dramatically clear to the group.

5 –Discuss and evaluate the role-playing

After an enactment, the teacher thanks the performers, and asks the audience:
«What is happening?
How does Mugo feel? How does Ola feel?
What about John and Mary?
Could that kind of dialogue really happen?
What will happen now?
Why does Mugo behave the way he does?
Why does Ola behave the way she does?
Why are John and Mary that concerned?
Are there other ways this situation could end?

Let the teacher probe further:
Could this happen to you or to people you know?

6 –The re-enactment

If time and need dictate, let other students play the roles in the same situation; or carry forward the first roles in terms of further consequences. Sometimes the teacher may keep certain performers in their roles and change others to get more effective role-playing, and alternative solutions. Occasionally, he may ask a performer to switch roles for the same purposes.

7 –Sharing experiences and generalizing

The teacher leads the students to generalizing or reviewing the solutions that have been explored, by asking the question:
«Where are we now»?

It is hoped that at the end of the enactments and re-enactments, the students who originally sympathised with Mugo and Ola's feelings to keep on trying for a son, may likely change their attitudes after hearing the more rationalized views from those who portrayed John and Mary's roles.

TABLE 1

Population Size of some African Countries in 1982; All Industrial Market Economies (Developed Capitalist Countries (1982); their average annual population growth rates (1970–82); and Gross National Products in 1982.

Country	Population (millions) mid-1982	Average Annual Pop.Growth rates, 1970–82	GNP Per Capita US $ 1982	GNP Per Capita Average Annual growth rates 1960–82
Chad	4.6	2.0	80	–2.8
Mali	7.1	2.7	180	1.6
Burkina Faso	6.5	2.0	210	1.1
Somalia	4.5	2.8	290	–0.1
Ethiopia	32.9	2.0	140	1.4
Zaïre	30.7	3.0	190	–0.3
Malawi	6.5	3.0	210	2.6
Uganda	13.5	2.7	230	–1.1
Tanzania	19.8	3.4	280	1.9
Kenya	18.1	4.0	390	2.8
Lesotho	1.4	2.4	510	6.5
Botswana	0.9	3.3	900	6.8
Zambia	6.0	3.1	640	–0.1
Zimbabwe	7.5	3.2	850	1.5
Nigeria	90.6	2.6	860	3.3
All Industrial Market Economies	722.9	0.7	11,070	3.3

Sources: (i) The World Bank, 1984, *Toward Sustained Development in Sub-Saharan Africa*, Selected Tables (Washington DC).
(ii) The World Bank, 1984. *World Development Report 1984*. Table 2 (Oxford University Press) (Washington DC).
(iii) UNFPA, New York 1984, Botswana: «Report of mission on Needs Assessment for Population Activities», (May) p. 29.

Note: – Obtained from source (iii) the page on «Demographic Indicators».

TABLE 2

Socio-Economic Indicators

Total fertility rates (1982); Age dependency ratios (1980); Index of food production per capita (1982); Life expectancy at birth; and estimated doubling time of total mid 1982 population of some African countries and all Industrial Market Economies

Country	Total fertility rates 1982	Age dependency ratio 1980	Index of food production per capita (1982)	Life Expectancy at birth (years)	Estimated doubling time of total pop. from mid 1982, years date*
Chad	5.5	78	95	44	35 (2017)
Mali	6.5	100	83	45	26 (2008)
Burkina Faso	6.5	96	95	44	35 (2017)
Somalia	6.5	88	60	39	25 (2007)
Ethiopia	6.5	93	82	47	35 (2017)
Zaïre	6.3	93	87	50	23 (2005)
Malawi	7.8	96	99	44	23 (2005)
Uganda	7.0	102	86	47	26 (2008)
Tanzania	6.5	99	88	52	21 (2003)
Kenya	8.0	117	88	57	18 (2000)
Lesotho	5.8	83	84	53	29 (2011)
Botswana	6.5	101	73	60	21 (2003)
Zambia	6.8	103	87	51	23 (2005)
Zimbabwe	8.0	113	87	56	22 (2004)
Nigeria	6.9	99	92	50	27 (2009)
All Industrial Market Economies	1.7	55	144	75	100 (2082)

Sources: (i) The World Bank, 1984. *Toward Sustained Development in Sub-Saharan Africa*, (from selected tables) (Washington DC).
(ii) The World Bank, 1984. *World Development Report 1984* Table 2.

Note: * Calculated from Average Annual Population Growth Rates 1970-82, in Table 1.

PART II

COUNTRY AND REGIONAL EXPERIENCES

Talabi Aisie LUCAN*

POPULATION EDUCATION IN SIERRA LEONE

Up to the mid-seventies mention of the term «Population Education» in Sierra Leone met with the most unfavourable reactions. Some asked «how dare anyone suggest that there was something wrong with our population to necessitate some education about it». Others felt that it was another name for sex-education – a trick to reduce the already small number of people in this tiny West African state.

The population of Sierra Leone according to the 1963 census was 2,180,335. Most people expected the 1974 census to record a much larger increase than it did – inspite of the 47% at 2,735,159. This, for a territory of 27,925 sq.miles or 73,326 sq.km. meant an overall density of 99 persons per sq.mile or 37 persons per sq.km. To the average Sierra Leonean, these were the population facts that mattered, facts which do not come anywhere near the density in Nigeria or Kenya or countries in Europe, the Americas, or Asia. Few realised that the population facts which needed the serious attention of every Sierra Leonean included:

– An overall density of 1,341 persons per sq. mile of arable land (22,120 persons in the urban western area).
– An age composition which was made up of 40.6 per cent under 15 years, 54 per cent aged 15-64 and 5.4 per cent aged 65 and over.
– An infant mortality rate of 227 per 1000 live births and an overall growth rate of 2.1 per cent which was an increase from 1.9 per cent in 10 years.

Surely this situation was likely to create adverse socio-economic conditions and therefore warranted some understanding through what was being termed, «Population Education».

The trends were already evident during the preparation of the first national development plan 1974-79 which recognised the «problem associated with rapid and accelerating population growth», and stated «it is generally recognised that a population expanding too rapidly aggravates many economic and social problems».

Under the circumstances it was felt that population education would inform on:

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– The relationship between socio-economic development and population factors.
– The implications of the changing demographic scene for Government's efforts to reach higher levels of human development.

In the light of the above considerations, in 1976, the Government of Sierra Leone called upon the United Nations Fund for Population Activities (UNFPA) with Unesco as Executing Agency to assist in implementing a curriculum development project at the Institute of Education, University of Sierra Leone, for the purpose of integrating population education concepts into the school curricular. The project, entitled «Integration of Population Education into the School Curricular – In-service and Pre-service teacher education» was intended to revise the curriculum particularly in the Social Studies at Secondary level and to train teachers in population education through in-service and pre-service courses.

A project document calling for a three-year project was submitted in December 1976 with April 1977 set as the date of project commencement. To facilitate the implementation of the project the Government of Sierra Leone contributed the equivalent of 100,000 dollars per annum in cash and kind whilst the UNFPA contributed 147,000 dollars to cover the three-year period.

OBJECTIVES

The project, which actually became operative in September 1977 for a three-year period ending 1980, had the following objectives:

Immediate Objectives

1 –To develop a core of Sierra Leoneans qualified in Population Education.
2 –To integrate population education concepts into the curricular for secondary schools and teachers colleges.
3 –To train, in the new integrated curricular, teachers already engaged in trials teaching in pilot schools in different parts of the country, so that they may train and give support to their colleagues.

Development Objectives

1 –To integrate systematically, population education into the whole educational system of Sierra Leone.
2 –To create an awareness of the implications and consequences of population growth on the socio-economic development of the country.

PROGRAMME INITIATION

The programme was initiated at a Seminar held in December 1977 with the assistance of a Unesco Consultant who had spent the preceding two months preparing background material and giving an orientation to the project personnel. The eight day seminar, was attended by primary and secondary school teachers of Social Science subjects, University personnel, Principals of Secondary Schools, Policy makers, Educational administrators, Teacher Educators, Officials of the Ministries of Education, Health, Housing, Agriculture and National Resources and members of the general public. It had as its theme «Towards a Better Quality of Life» and aimed at:

– Creating an awareness among secondary school teachers in particular and the public in general of the nature of population education;
– Promoting an understanding of the relevance of population education to national development;
– Identifying and recommending objectives of and concepts in population education for inclusion in the curriculum;
– Identifying and recommending a strategy for achieving the objectives and for integrating population education concepts into the curriculum;
– Recommending follow-up activities in the progress of integration of population education concepts into the curriculum with special reference to Social Studies.

Participants who were exposed to ten lectures on the population situation in Sierra Leone, the Africa Region and the world, discussed population issues and their close relationship with economic and social development; and found out the educational responses to the identified problems and needs in the Sierra Leone context. Panel discussions were held, findings of relevant studies consulted and field trips conducted. Working sessions were organised in three groups during which documents prepared by the consultant, based on the national situation, were discussed.

The objectives of the proposed Social Studies/Population Education Programme were clarified, and the more specific objectives of the seminar promoted. The draft report which was a consensus of the group reports presented, fulfilled the objectives of the Seminar most satisfactorily. A Final Report of the Seminar was subsequently produced and work on the implementation of the recommendations began in January 1978. The following *objectives* were recommended:

– To develop in the learner and understanding of the interrelationship between the population situation and the physical, social and cultural environment and the effects on the quality of life of the individual, the family, the community and the nation;
– To develop in the learner the skills for identifying problems associa-

ted with rapid population growth, with a view to helping him arrive at alternatives that would enhance a better quality of life.

CHOICE OF SUBJECT AREA

In view of the high prestige attached to the well-established disciplines of the existing curriculum (as a basis for upward mobility) it was easier to begin the exercise with a subject (Social Studies) which was in its innovatory stages. This resulted in what Professor Sloan Wayland later described as «an innovation within an innovation». The project therefore assumed a different approach from others elsewhere. Population Education was to be introduced into the curriculum by means of a new subject which was itself just being established.

The *rationale* for integrating population education into the National Programme in Social Studies was also established at the seminar. It was felt that Social Studies education provides the learner with varied skills of inquiry, knowledge and learning opportunities and their application to new problem-solving situations in the day to day encounter with the real world. Further, social studies as an open curriculum, could be enriched from time to time by revisions and the introduction of new areas of learning, new skills and new inquiry and instructional strategies. In consequence it can be developed and structured to accommodate new concepts from a wide selection of disciplines of the humanities and social sciences as well as from other subject areas which have a direct bearing on man and his interaction with his physical, social and cultural environment e.g. population education. In effect, full responsibility for operating the programme in population education, was to be assumed by the Social Studies Unit of the Institute of Education University of Sierra Leone.

LEVEL OF INSERTION

It was decided that the population education programme was to be developed and taught to pupils in the first three forms in the secondary school. Such a decision was based on the premise that:

1 –The first three forms of the secondary school followed a general programme and only in Forms Four and Five are pupils prepared for external examinations in certain subject areas.

2 –The pupils at this stage of development should be able to conceptualise the consequences of rapid and uncontrolled population growth and its implications for themselves, their family, the community and their nation.

3 –Through the programme, the pupils would eventually be able to make informed and rational decisions on matters relating to population, like, when to marry, how many wives to marry, when to have

children, size of family and to make positive moves towards ensuring an improved quality of life for their family, community and nation.

DEFINITION

The following definition was decided upon:

Population education is concerned with a study of the population situation and its implications for the family, the community, the nation and the word. The following concepts were identified to begin with:

– Population (human and non-human);
– The human population of an area;
– The structure and composition of a given population;
– The family-size, types, and growth;
– Basic family needs of food, shelter and clothing in relation to family size.

STRATEGIES

The strategy recommended at the Seminar was that both the minor and the major revision approaches be used in the integration of population education concepts into the existing curriculum of the National Programme in Social Studies (NPSS) for the lower secondary level. The curriculum based on the general theme, «Man in his Environment», was being developed, using the following topics:

1 – Man himself i.e. his origins and his characteristics and abilities (this had been completed in 1977 and was already being prepared for use in the first year secondary classes. Hence the minor revision approach, necessitating the production of a Population Education Supplement, was recommended).
2 – Man's Abode i.e. his physical environment and his adaptation to it (this was in the process of development for 2nd year secondary and the major revision approach was recommended).
3 – Man in Society i.e. his social environment and his patterns of organised living (this was to be developed for 3rd year secondary and the major revision approach was recommended).

The programme therefore began with strategies for the preparation of the first year Population Education Supplement using the concept recommended.

STRATEGIES FOR PROGRAMME DEVELOPMENT

Project Team

The team consisted of the Curriculum Co-ordinator as National Project Director, a Programme Development Officer, an Evaluator and four teachers of Social Science subjects.

Population Education Advisory Committee

A National Population Education Advisory Committee was set up to monitor the progress of the project and to advise on further developments. It was composed of representatives of the Ministries of Education, Health, Development/Economic Planning, Social Welfare/ Rural Development and Housing, the constituent colleges of the University of Sierra Leone, Milton Margai Teachers College, the Home Economics Association, the Conference of Principals of Secondary Schools, the Social Studies Association of Sierra Leone, the Planned Parenthood Association and the Central Statistics Office. The Committee met once a term; therefore three times a year.

Programme Antecedents

Questionnaires were sent out to secondary schools to get an overall estimation of ideas about Population Education. Visits were made to interview teachers, especially those who had not attended the Seminar, to find out their views on the subject and to determine the selection of teachers for attachment to the project. A few parent/teacher associations were addressed and opinions invited. The information gained indicated doubts about the relevance and content of the course but guided the choice of materials for teaching, and the selection of pilot schools.

Selection of Schools

Initially twelve and later, twenty-four secondary schools were selected as pilot schools. They were representative of different standards (good, fair) different experiences (old-established, newly established) different pupil compositions (all male, all female and mixed), different locations (in 8 out of 12 districts in urban and rural areas in all 3 provinces and the western area). These schools had to be constantly supplied with materials.

Assignment of Teachers on attachment to the Population Education Unit

Eight secondary school teachers were nominated for initial training and four selected for further training in curriculum development, population education and the preparation of materials for teaching. After a short course given by the project staff, the teachers were permanently attached to the project.

Development of Instructional Materials

Materials, comprising pupils texts, teachers' guides and accompanying charts were developed in the following way:

1 – Under the supervision of the Programme Development Officer, the teachers usually developed a conceptual framework, prepared the curriculum outlines, using the given topics, identified population education concepts and drafted curriculum units incorporating the concepts.

2 – The draft units were then presented at writing workshops, where teachers, who were expected to try them out in the pilot schools examined them for relevance, suitability of content, and appropriateness to the level of the students for which they had been developed. The teachers were aided in this process by a panel of resource persons with qualifications in demography, population education, sociology, history, geography and curriculum development from the university and teacher training institutions in the country.

The units were thus evaluated and revised during this process.

3 – After revision the materials were edited by the project team under the supervision of the project director, and illustrated by a part-time artist.

4 – The finalised materials (text and visuals) were usually multiplied in time for the In-service Courses at which teachers from pilot schools were introduced to them and trained to use them, whilst also being trained in Population Education. During training courses, field trips were organised to areas where examples of population issues were evident, and teachers were made aware of them and taught to conduct surveys of such areas.

5 – Pre-tests on the knowledge, skills, attitudes and values covered in the units were prepared and administered by the Project Evaluation Officer to both experimental and control classes in the pilot schools before the materials were used.

6 – During the trial testing, the programme was monitored by the Project team. Members of the team visited the pilot schools monthly to conduct in-class observation of teaching and give demonstration lessons where necessary. They also collected feed-back from school principals, teachers and students on the programme. Teacher evaluation check lists and teacher and pupil feed-back sheets were used in this process.

7 – On completion of the units, post tests were administered in the same classes as the pre-tests and the results later compared.

8 – Trial teaching was followed by evaluation workshops at which analysed results of the pre and post-tests were presented, experiences and observations exchanged and discussed, before a final revision was done.

RESTRUCTURED MATERIAL

By 1981 it had become evident that there was need for a more adequate coverage of the population concepts which had been identified. A Tripartite Review held in March that year extended the life of

the project for another two years. This gave an opportunity for a restructuring of the course. A Spiral Curriculum was therefore suggested and a new conceptual framework devised using – the same general theme: Man in His Environment. This resulted in constructing six new topics namely:

1 – Man's Origins, Development and Characteristics
2 – Man's Environment
3 – Man's Culture
4 – Population and Resources
5 – Communication in the Service of Man
6 – Global Issues – Achievement and Problems.

The approach used here is Jerome Bruner's spiral curriculum which means that the six topics are introduced in the first year and repeated in greater depth and wider scope each succeeding year. Population concepts have been carefully integrated into each topic/unit in a natural manner, as shown. Although the materials have been produced for a three-year course the curriculum is designed to cover an additional two years to the end of the secondary cycle, in the hope of future extension of the course span.

TEACHER TRAINING

In-service

Apart from the training given to teachers in pilot schools, in-service training courses were given to teachers in schools which were termed «project» schools. These were schools which made request for inclusion in the programme.

Teachers from these schools were trained at courses held at regional centres annually for two to four weeks in July and August. The courses aimed at:

– Training teachers in the philosophy of the Social Studies;
– Exposing teachers to the meaning of population education and the rationale for its integration into Social Studies;
– Training teachers in the use of materials produced for trial teaching;
– Helping teachers understand population concepts integrated into the material to be tried out in the schools;
– Providing teachers with background material on demography and the population situation;
– Training teachers in the methodology of Social Studies/Population Education;
– Giving teachers an opportunity of participating in field trips and preparing teaching aids relevant to their teaching.

Lectures were usually given by Project Staff and Resource Persons from the University and other Institutions, and occasionally from Unesco Consultants.

Pre-Service

In 1980, arrangements were concluded with Milton Margai Teachers College which trains students exclusively for the lower forms of secondary schools for the preparation of a course in Social Studies/ Population Education for pre-service education. A draft Teachers' Guide incorporating the course was prepared and a training programme devised.

A two-week training programme for teacher educators was conducted in two consecutive years, the first with the assistance of Professor Jayasuriya under a Unesco Consultancy. Later, in 1983, two lecturers of the course went on a month's training under Professor Sloan Wayland at Teachers College Columbia University. Two University Lecturers from Njala University College had also obtained the Masters in Population Education in 1977–1979 from the same institution

The pre-service programme at Milton Margai Teachers College (offering a three year course) is now in its third year and it is expected that at the end of the 1984/85 academic year, students entering the schools will be prepared to teach the subject.

METHODOLOGY

Both at In-Service and at Pre-Service training, the enquiry method of teaching was emphasized. Apart from training in the conduction of field trips and surveys, other methods were advocated. These included brainstorming, use of springboards, simulation games, role playing, conducting case studies, planning projects, holding small group discussions as well as class debates and panel discussions. Interesting ways of using the very popular lecture method was also devised and encouraged.

Training was also given in the preparation of teaching aids such as graphs, charts, games and illustrations as well as in photography.

To facilitate continued training of teachers in secondary schools, heads of Social Studies/Population Education departments in project schools undertook special courses organised by the project team to equip themselves for the responsibility. This strategy will be repeated as more schools become involved in the teaching of population education.

MANAGEMENT

Administrative

The location of the project in a curriculum development centre which was headed by a Co-ordinator designated Project Director, was of great advantage. Administration of the project followed a set pattern:

– Initial work plans were devised, periodically reviewed and revised as necessary, jointly by the project team.
– Strategies for implementation were considered and decided upon.
– Each team member was assigned certain responsibilities.
– Frequent consultations (internal and external) were held.
– Advice was sought at regular meetings of the Population Education Advisory Committee which discussed the plans, gave necessary approval and subsequently monitored what was being done.
– Regular internal meetings for progress reporting were also held.
– Checks were made as work progressed and work done was systematically evaluated.
– Final reports for the executing agency were jointly compiled.

The fact that work was concentrated in only one subject area, which was also the speciality of the project director, made administration comparatively simple.

Financial

Budgetting was done by the project director after internal discussions as well as approval by the Advisory Committee; and subsequent consultations with the UNFPA Co-ordinator or the UNDP Project Officer.

The project had an advantage in that the institution in which it was based permitted the use of the services of its established Finance Unit. All approved funds were disbursed and accounted for by the Unit under the direction of the project director and the Secretary of the Institute of Education.

The main constraint was «timing» by the UNFPA in the release of funds. Authorisation was often received late in the year for funds needed for activities at the beginning of the year. This was always disturbing, but was contained because of access to funds which could be borrowed from the Institute.

PROJECT RESULTS AND THEIR UTILIZATION

By the end of December when funding totalling 371,631 dollars from the UNFPA was terminated, the curriculum in Social Studies integrated with Population Education had been completed for Secon-

dary Schools and Secondary Teachers' Colleges. In addition, three editions of draft textbooks culminating in a final edition with six units each for the first three years of the secondary cycle had been written, tried out and the final edition handed over to a publisher contracted by Unesco for preparation ready to be printed in large numbers under Unesco's auspices. Furthermore a Teachers' Guide for each year had also been drafted; and a Population Education Kit and some charts produced. There was also a population education supplement and an accompanying teachers' guide.

All the secondary schools have expressed a wish to embark on the teaching of Social Studies/Population Education as soon as textbooks become available and the West African Examinations Council includes it in its syllabus for the Ordinary Level examinations taken at the end of the fifth year in the secondary school. The syllabus which has already been prepared is being further reviewed by the Ministry of Education and other selected educators before its submission to the Examinations Council for consideration. The indications are that it will be favourably considered.

In the interim, over 80% of the schools have committed themselves to using the materials already produced to the third year when they are available. A total of at least 30,000 copies are expected for the 1985/86 school year.

Primary Teachers' Colleges have been sensitized to the need for Population Education, and the results of interviews have justified the integration of Population Education concepts into the curriculum at that level during a forthcoming revision. At a recent revision of the Primary School Curriculum, Population Education Concepts were included in the Social Studies, Science and Home Economics Syllabi.

The Social Studies/Population Education programme has taken root at Milton Margai Teachers' College, and a Research Project has already been undertaken to aid pre-service training. The title is «Population Factors in Relation to Cultural and Socio-economic Development» – a study of attitudes and impacts at the household level.

In anticipation of the expansion into the upper secondary classes, the Department of Education of Fourah Bay College and the Teacher Education Department of Njala University College have held seminars in population education.

As a result of his training in this project and the opportunity provided for him by the project to attend a training workshop and go on a study tour abroad, the Principal of one of the pilot secondary school, who is also Secretary of the People's Educational Association has been influential in the introduction of Population Education into Adult Education Courses.

The availability of the textbooks which secondary school students will be able to take to their homes for their parents to see and read

will contribute immensely to the attainment of the development objective of creating an awareness of the implications and consequences of population growth on the socio-economic development of the country. However it would only mean one step towards the systematic integration of population education into the whole educational system of Sierra Leone.

Ruby PARDIWALLA*

POPULATION EDUCATION AND FAMILY LIFE IN SEYCHELLES

The Republic of Seychelles, which is made up of 115 islands, occupies a land area of 435 square kilometres. It spreads out over a stretch of more than one million square kilometres in the Indian Ocean between latitudes 4 and 5 degrees south of the equator and longitudes 55 and 56 degrees east of Greenwich Meridian.

The population, estimated today at 64,300, is made of a melange of African, European, Indian and Chinese people. The majority of the population is concentrated on the main island, Mahé, and a large number of the smaller islands are uninhabited. The rate of natural increase for the past five years stands at 1.9% per annum. The latest figure for birth-rate per 1000 is at 25.8 and the infant mortality has achieved a record of 14.4 per 1000. As in many third world countries, 40% of our population is under 15 years of age and understandably, the welfare of this young generation is of particular concern.

Since the Liberation Movement of June 1977, the Republic of Seychelles has concentrated its energy on the building of a new, more equitable Socialist society. After all the years of British colonisation, Seychelles had to start standing for its rights; and the initial path it took is neatly summarised in the Seychelles Peoples Political Front, policy statement, September 1978. «... our country must become like a vast school, where the people will keep on learning as they work, and contribute to the development of their new society». It is against this background, that the *Family Life Education* programme was launched in 1979.

What initiated the programme? Seychelles had undergone major changes in the relatively short space of a decade and certain effects of these changes were being reflected in changing patterns of adolescent sexual behaviour. This trend in teenage sexual behaviour is a world-wide phenomenum, but in Seychelles, it had reared its head almost overnight with the opening of an International airport in late 1971.

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The setting already existed with the poor social conditions, namely crowded housing, high illiteracy rate, alcoholism, illegitimate births and the socially accepted different double standard for men and women. (From an early age, boys are given free sexual liberty whereas girls are severely restricted. A common Seychellois saying summarizes the situation». I am releasing my cockerel, gather up your chicks») But all these factors were combined with rigid, traditional attitudes towards sex, in a relatively stable society, where sexual behaviour was governed by church mortality (90% Roman Catholic), and social consensus.

However, with the dissemination of western values brought in by tourism, influx of pornographic sex through the media, the changing family structure, the early maturation of teenagers, the situation became explosive, resulting in the breakdown of traiditonal institutions and values.

Following a request from the Ministries concerned, UNFPA agreed to finance a five year, «Maternal and child health project». The main goal was to enchance the development of healthy, mature, responsible attitudes towards sexuality, thus helping the young to make responsible decisions about their lives, which would benefit the society as a whole. The immediate concern was to open up communication channels, cut down on the rate of teenage pregnancies, limit the incidence of venereal diseases, eradicate illegal abortions and encourage child spacing.

Our high-risk group were the teenagers and we decided to tackle the problem through information and educational strategies levelled at this age-group. One of the major problems was how to reach young people and in those early days we opted for school-based programmes, as the youth are already there. (Today the total number of students in our educational institutions stands at 21,332, 32.8% of our population).

The first step which took almost a year to accomplish was to establish links with key people and organisations to explain the purpose of the project. In a country where sexual discussion is a taboo subject, this was not easy. Also, in those days, any new venture was good enough excuse for the opponents of the Government to attack the new Socialist Government. Furthermore, many politicians were not convinced themselves and/or were afraid of the repercussions from the influential opposition and religious leaders. In a small country, where everyone knows each other, malicious insult can be quite vicious, and gets directly to the person towards whom it is levelled.

Before 1977, the majority of schools were on mission land and most schools were run by Roman Catholic priests and nuns. The state was moving in towards zoning and nationalisation of all schools. This implied supervision and control of the school curricular. To accommo-

date new subjects on the time table, cuts were made on the number of Religious Education periods. Family Life Education and Political Education were some of the new subjects being planned for, and in the current of all these changes, there was a period of instability and counter-reaction.

Seychelles had a different experience in the sense that the Government was the implementing agency of the project. The activities of the two ministries concerned, namely Health and Education, were co-ordinated by the Ministry of Planning and Development.

The interministerial committee which met twice a year to formulate policy and review progress, was chaired by the Principal Secretary of the Ministry of Planning, and represented on the committee were top level officials from the ministries of Health, Education, Labour and Social Services and Statistics Division.

The project management committee which originally met once a month and later once every three months, was chaired by the Director of Medical Services. Other members included an Education representative, a gynaecologist; a Family Planning doctor, Statistician, project administrator and project accountant.

One of the drawbacks was the lack of sufficient trained local personnel which resulted in a large proportion of expatriate staff on the committees. These members came from different countries and were employed on short two year contracts which resulted in widely differing views and also did not maintain continuity.

Also due to the shortage of trained local personnel, the work load on a few people was quite heavy. For the educational component of the project, only one person was designated to take care of all the activities. It was only three years later that an assistant was appointed. Today, the unit is incorporated in the National Institute of Pedagogy and has a staff of three with different educational backgrounds; Science of Education, Biology, Home Economics and Nursing. Their main activities include teacher training, curriculum development, community education and on-going evaluation of the educational activities of the project.

A Family Life Education advisory panel drawing top-level people from the different ministries, organisations, religious dominations, political party and parents was set up to guide and gain involvement of as wide a population as possible. Alongside was set up a Family Life Education working panel to implement the resolutions of the advisory committee. This panel was made up of teachers, nurses, social workers, youth leaders and parents.

With the delicate situation of the schools at that time, we decided to extend our educational efforts beyond the confines of our original target group. If we hoped to get our school programme accepted, we had to first inform the population at large and raise an awareness of

the problem. We needed to touch parents, out-of-school youth, young adults at work, different religious denominations and not least policy decision-makers.

Great emphasis was laid on training. Intensive training sessions were organised for groups of teachers, nurses, social workers and youth leaders (groups which included parents). These sessions were conducted by local resource persons and international consultants provided by the UNFPA project. One very interesting fact which emerged, was the ignorance or misinformation of sexual knowledge, and the enthusiasm and willingness to discover more about human sexuality was very encouraging. These early sessions provided a useful base from which to launch the school programme. Undoubtedly, we had overestimated peoples' knowledge of sexuality. The project owes its achievement to the committment, conviction, determination and willingness to learn of this pioneer group. Much credit goes to a particular small group of devoted teachers.

In early 1980, a mass campaign was organised around the theme of *Teenage Pregnancies*. This nation-wide mobilisation utilised all the available sources of mass media and was promoted in all the twenty-three electoral districts throughout the Republic. The sessions were animated by small district committees comprised of teachers, nurses, social workers and youth leaders. They included discussions on the problem of teenage pregnancies, lectures, drama groups, film shows and question sessions. Active participation was encouraged and people suggested ways of solving the problem. Interestingly, a lot of people were in favour of educating the young about Family Life and parents felt that they needed the information at the same time, as they could not bring themselves to talk about sexual matters to their children. Similar future sessions were requested on regular basis and through these meetings, we touched a wide stratum of the population, ranging from sports' associations, women's associations, political branches, parent/teacher associations to school children.

As part of the campaign, there were national radio broadcasts, (ninety-six percent of the population is reached by radio), round-table discussions, controversial plays, spot messages and interview sessions on the topic were organised. The local paper also carried articles on the subject. Song, poetry and poster competitions were organised and attracted a high participation from different backgrounds and age groups. Selected entries are today used as teaching aids.

The ball was in the playing field. For better or for worse, we had raised an awareness and people felt involved.

In 1981, the first steps of a draft curriculum was put into place and permission granted to start a pilot trial in five schools. Family Life Education was accorded one forty-minute period per week in each class from primary seven to primary nine inclusive (12–15 years old).

After evaluation of content, teaching methodology, teachers' and students' reactions, the programme was introduced in all schools at the levels of primaries seven to nine, by the end of that year.

A revolutionary step in the teaching of Family Life Education, was the use of the local patois, creole, which up till then was officially forbidden in the school curriculum. We strongly felt that being an affective subject, it had to be taught in the mother-tongue. Vocabulary of sexual terms, as in all languages, presented a problem, more so as creole was not then a written language. Today, with the introduction of creole as the medium of instruction in the lower classes, this problem has been purged, and a written vocabulary of accepted terms has been established.

Gradually, the programme was introduced into the lower classes following training of teachers and development of an appropriate, evaluated curriculum material.

Sex education, in our system, is seen in a wide perspective of general, all-round improved family welfare. Topics range from nutrition, personnal hygiene and health care, human anatomy, human relationships, community health, parent-hood, family budgets, family planning, child-care to demography.

Over the last years, we have put emphasis on the production of local didactic material, which depict Seychellois reality. Posters, leaflets, booklets, slides, video-cassettes have been produced in collaboration with teachers and students. All teaching aids are tried out, selected and revised carefully on a sample population before being accepted in schools.

Active teaching methodology is recommended. Teachers are trained in communication skills, principles of group-dynamics, evaluation techniques and during training experiment with the different techniques such as dramatisation, mimes, etc.

Today, Family Life Education forms an integral component of the curriculum in all schools, with each school having a team of specialised teachers. It features in the curriculum of the Teacher Training College and regular in-service courses are run to assess, evaluate, revise and up-date the programme.

This project ended at the end of 1983 and the unit is currently involved in an extension phase of the project to implement Family Life Education in the National Youth Villages.

In 1982, a youth centre was opened in the capital to provide free contraceptive advice and counselling. This service has since been decentralised and similar centres are being set up at district level. Teenagers are reluctant to make use of the services despite the fact that contraception is offerred free of charge in all district health clinics. Much work needs to be done at parent level to increase parent/child communication, as one of the main reasons for not using contraceptives stems from the fear of parents finding out.

UNFPA has recently approved a further three-year extension aid to develop the programme in the National Youth Villages, along the same lines as the previous project.

What can be said about our five year experience?

– The rate of teenage pregnancies has gone down slightly.
– Venereal deseases are more controlled.
– Contraception use has greatly increased.
– Female sterilisation is widely practiced.
– An abortion bill has been approved.

However, it is far too early to credit this change to Family Life Education. Seychelles has undergone tremendous changes in this short five year spell and numerous factors have contributed. Moreover, the statistics are not significant enough to draw any realistic conclusions yet; and anyway, there is always the critical question of the effectiveness of attitude change. How does one prove the link between knowledge and behaviour effectively? Follow-up studies are needed to ascertain the long-term effects of the programme on the students' knowledge, attitude and behaviour in the future. Serious research needs to be carried out in the immediate future to study patterns of social behaviour and organisation.

The programmes need to be continually evaluated to determine precisely the information young people need and receive, and factors influencing behaviour. Training activities and information campaigns need to be continued on a regular basis. Stronger collaboration should be encouraged at all levels and the concerted effort of all put together to achieve our goal.

Abdi Ibrahim AWALE and Tony JOHNSTON*

SOMALIA: A NATIONAL PROGRAMME IN POPULATION EDUCATION

In January 1981, a project proposal was signed by the Government of Somalia and the United Nations Fund for Population Activities (with Unesco as the executing agency) governing project assistance in the implementation of population education activities in this Republic. This project agreement, which was the result of a needs assessment mission undertaken by the UNFPA set the immediate objectives for the proposed programme as follows below.

IMMEDIATE OBJECTIVES

– To establish (within the Ministry of Education) a population education section which would be responsible for planning, implementing, monitoring and evaluation of population education programmes.
– To carry out feasibility studies on the incorporation of the objectives, concepts, contents and methods of population and family life education in the educational system.
– To integrate population and family life education into the curricular of primary and secondary schools, as well as teacher training colleges.
– To produce teaching materials on population family life education for use in the primary, secondary and teacher colleges.
– To impart training to primary, secondary and teacher training teachers on the subject of population and family life education, and to supervise the introduction of these courses in the teachers' training colleges.
– To publish a population education newsletter in the Somali language.
– To organise a national seminar on population education in collaboration with other ministries, departments and voluntary organisations.

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– To co-operate in the population-related activities of other ministries, departments and voluntary organisations for example, in the rural development campaign, adult literacy programme, activities of Somali Youth and Women's Organisations etc.

As all of these objectives have now been attained to the point of evaluation, it is possible in retrospect to examine the strategies adopted in the programme's implementation, which if the immediate objectives be summed, involves the institutionalization of population-family life education within the formal educational system of Somalia.

IN SCHOOL STRATEGIES OF IMPLEMENTATION

The programme of population education proposed got underway in mid 1981, following the establishment of a population unit or cell within the Planning Department of the Ministry of Education. The assets of this location were perceived by the Ministry to be threefold. Firstly, it was in this department that the «demographers» had been traditionally located. And thus there were knowledgeable, population interested personnel on hand that might form the nucleus of a project team. Secondly, it was this department which managed all national educational developments. Finally, this department was uniquely placed managerially to foster the co-operation that would be needed with departments and divisions governing teacher training, women's education and non-formal and adult education.

The initial unit established comprised a staff of six Somali educators plus an international adviser from Unesco. The local staff possessed strong backgrounds either in population studies (Demography) or in some specific area of curriculum development. All were experienced teachers, and two had had periods of service at headmastership or inspectorate level. With time the staff of the unit had grown to 16 with the addition of people with specialist skills in teacher training and non-formal adult education.

The initial cell having been established, it was important to identify at a national level what local decision makers perceived to be the significant population-family life issues confronting the society. It was important to also comprehend the nature of the socio-cultural constraints that were likely to shape the content and methodology of the school programme, and any activities planned for youth and adults beyond the school.

With these ends in view the project initiated the First National Conference on Population entitled «Somalia: Population Social and Economic Development». Planners and decision makers from key Governmental Ministries, non-Governmental Organisations and International Agencies attended. Three broad and basic population issues were identified: Rapid population growth, uncontrolled and high rate

of rural to urban migration and emigration as a consequence of internal migration and a series of urbanization problems. At a more micro level (that of family and community) the dominant issues to emerge included the size of extended families and the associated high dependency ratios, the poor health status of low income families with associated high fertility, high infant and child morbidity and mortality rates, problems associated with short child spacing (e.g. maternal anaemia) and the status of women in the society (polygyny, female circumcision, etc.).

The obvious constraints that became evident related to sensitivities about the role of the school as an educating mechanism in the matter of inter-personal relationships, and socio-cultural practices of long standing, and to the degree to which the community was prepared to accept the notion of family limitation as a solution to family life problems. It was however clear that the society was prepared to accept the issue of family spacing as a valid issue warranting educational intervention.

The papers produced by this conference of decision-makers were edited by Project personnel to form an initial source book. The purposes of this volume (produced both in English and Somali) were to raise the awareness of planners to population family life issues; and to provide them with what basic data were available, in order that they might understand the inter-relationships between the above population concerns and various aspects of social and economic development at both national and community levels (e.g. food production, distribution and supply, health and education services, manpower and employment etc.). The source book in this form was subsequently distributed to all planning and servicing divisions of the Government and related agencies.

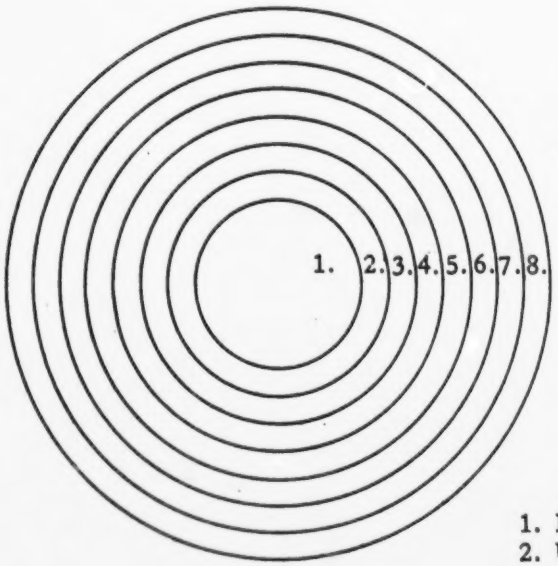
Having defined the main issues, the next stage was to take this content and reproduce it in a form that could be used by curriculum developers, teacher trainers, and even teachers themselves. The result of this process was the production of two smaller resource booklets entitled:

– «Somalia the last ten years» (A national level analysis)
– «Family life in Somalia» (A family community level of analysis).

These resource booklets produced both in English and Somali utilised a very simple and highly visual format in order to present information that readily could be understood and readily used in a training context with a variety of audiences. We continue to utilise revised versions of these booklets to provide an awareness background with such diverse groups as Regional Education Officers, teacher trainees and social workers operating from the Somali Women's Democratic Organisation through community orientation centres.

Intervention Levels

Concurrently with this «translation downwards process», an analysis of existing primary and post-primary curricular was undertaken, to ascertain the possibilities of «infusing» population related concepts, content, or themes into the traditional subject areas. At the *primary level* the most fertile subject areas proved to be: Social studies, general science and methematics. From the primary school analysis we built up a concentric model of content design (we began with population content focussed on the individual child, the family and the school. With grade progression we widened this content to include the community, the nation, the region (East Africa) and the World). (See the diagram below).



1. Learning about us
2. Us and our school
3. Our community
4. Other communities
5. Our nation
6. Our Food and People
7. Our Region (East Africa)
8. World.

At the secondary level the subject areas most conducive to intervention were biology, geography, history, and agriculture. For this level the unit devised a thematic approach using as a framework the inter-relations postulated by the phrase «Population, Resources and Environment».

Because we did not have the resources to produce text books for pupils, and because we wanted to move away from the «set text» idea, we developed for each primary grade a module of six lesson plans for teachers. (For each secondary form in Biology, Geography, etc, we also developed a lesson plan series). But before either the resource booklet, or the modules were printed in Somalia we tried out and tested these products, within the teachers' colleges and within a sample of urban, rural and nomadic regional schools. We then revised the material, in the light of the feedback. The most significant change made was the extension of suggestions for practical classroom activities. For a list of in-school materials prepared by the project see the Appendix A.

A two-fold task now confronted us. Firstly to devise an in-service teacher training programme that would reach all teachers at primary level, and all subject masters (in our areas of interest) at secondary level. Again we had to economise, and we also thought it best to provide extended training to a few, so that many might benefit. A master-teacher programme was implemented. A broad spectrum of teachers were selected from each of the 16 regions of Somalia. These master-teachers to be, were trained in three stages:

– An initial «content background providing» phase (2 weeks).
– An implementation phase focussing on content and method in a classroom setting.
– An apprenticeship phase where assistance was given in the training of five apprentices.

Some 18% of the teaching force were thus designated master-teachers, and if this is multiplied by five ... we have fair coverage. To date we have managed only some 16%. We are presently continuing the process of evaluating and certifying both master and apprentice teachers.

At one and the same time we addressed ourselves to the pre-service training of teachers. We used the seminar-workshop technique to involve both primary and post-primary teacher trainers (plus members of the inspectorate and regional level administrators). Presently population education content is infused into the basic training of *primary* teachers through the deans of the various subject areas and their departments. In December 1983 we began a *core* course in Population Studies for all *secondary* school trainee teachers. This core is additional to the population-related content carried by subject specialities.

But all of this is not enough. The teaching-learning process whether it be within a teachers' college, within the field, or more im-

portantly in the classroom it requires all the help that can be provided. We very quickly discovered two basic needs: – the need for visual aids to support the process, and the need to assist teachers to mount their own low cost aids. We have sought to meet these needs with:
– A series of charts for classroom walls.
– A hand book of suggestions for teachers to assist them produce the teaching-learning materials they need.

The response to the 18 colour charts produced has been particularly striking. In upper primary and secondary schools they are not simply a form of wall display. Being devised to cover the major population issues in cause and consequence format, they have become both a means of *lesson initiation* and *lesson summation/revision*. Moreover because they are most often displayed in rooms that are multipurposed (for example used by adult groups in the evenings) they are a focus for discussion among a much broader audience. There has followed a brisk demand for supply to other organisations in Somalia. Regional orientation centres have requested copies as have most of the Ministries with a stake in the population field (the latest of such request came from the Ministry of Agriculture). Other Agencies such as the Somali Water Development Agency and the Range and Livestock Agency have existing displays as does the Somali Women Democratic Organisation Headquarters. It is rumoured that the President has one in particular adorning his walls.

We have adopted a large amount of other population related films and film strip material (supplied by sister United Nations Organisations) to fit the Somali context. This is utilised on all regional visits to supplement and augment the in-school activities in population – family life education. Currently the project is engaged in the adaptation of audio-visual material (and the production of our own material) onto a Video Tape Recorder format so that the more readily usable, and indeed, more economical medium of television, might be used to vitalise and revitalise the in-school programme. The first of our population newsletters for both school and beyond school audience is now being printed.

Initial evaluations of the programme in schools and teacher training programmes have now been completed, and we will summarise these findings at the conclusion of this paper.

The National Programme of Population Education in Somalia (the title of this paper) has in reality two components, and we have thus far described but one of them, that which is oriented towards the formal school system.

The Programme Beyond the School

As our in-school unit grew, and as we developed the capacity to mount educational activities with a population, family life base, and

in particular as we began to develop printed and visual materials in this area, there came an increasing demand from other groups beyond the formal school system for assistance. Other projects funded by the United Nations Fund for Population Activities in Somalia, such as the family health project, and the workers population education project sought our assistance in staff training and in seminars and workshops organised for field workers. They were soon joined by organisations as diverse as the nutrition section of the Women's Division of the Ministry of Education, the World Food Programme and the Somali Institute for Development of Management and Administration (SIDAM).

Such demand has to be viewed against a background typical of so many developing countries of low school enrolment ratios. Only some 20 percent of our school going age population in Somalia is enrolled in the formal school system. While the institutionalization of a school-based programme has virtues in the long term (the education of the decision makers of the future etc.), the very nature of population pressures, necessitates some recognition of the need for some more immediate return via the population family life education of youth and adults beyond the school. So it was that, in late 1982, our unit approached UNFPA with the suggestion, that we expand our in-school programme, into the out-of-school field. At this stage the Ministry of Health, had a proposal before UNFPA for the funding of an educational programme in support of Maternal and Child Health services. As we were already involved in assisting other adult-oriented programmes, as indicated above, some funds for this programme were redirected to us. Thus, from the beginning of 1983 we have sought to develop what is now an out-of-school non-formal programme of Population-Family Life Education, or an «Information, Education and Communication» programme of activities.

Strategies of Development

The project staff began by identifying a number of key target groups within the community that might «piggy-back» a basic educational programme with a strong population component. For example:
– Personnel working (mostly under the aegis of the non-formal division of the Ministry of Education) on an institutional basis, particularly those associated with youth and adult women, such as educators in Women's Domestic, Nomadic Education and Adult Education Centres.
– Personnel operating educationally in the health field such as Community Health Workers, Nurses in Maternal and Child Health clinics, and Nutritional Educators working with the World Food Programme, and the Women's Educational Service.

With these groups the training workshop-seminar (using already produced resource materials) proved a reasonably effective teaching-learning tool.

We have steadily refined this tool however, to include a range of participatory learning activities as we have decentralized the training of trainers (of those involved with youth and adults in a welfare setting) down to a regional level.

In this broad based Information, Education and Communication type programme, we recognised early the need to understand what a much wider audience (the so-called man in the street) regarded as the important population related issues, and to find out how these were perceived, and to ascertain whether these perceptions were in accord with the current demographic reality, and the current community needs as we had previously defined them. In order to do this the project organised a series of participatory workshops for those working:

– With other UNFPA funded projects.

– With media personnel drawn from the Ministry of Information (press, radio and television) and also people with experience of the folk media.

– With community leaders drawn from every level and most organisational structures, such as party organisers, union officials, district officers, leaders of women's organisations, health workers and regional adult education officers.

– With religious leaders drawn from the Ministry of Justice and Religious Affairs, as well as the leading Sheiks of religious communities the length and breadth of the nation.

It was clear from these two-way contacts, that community needs as we had perceived them were not always those perceived by those with leading roles in the community. Secondly, it was obvious that while they perceived population issues clearly enough, they saw them in a reality of context and in a hierarchical form (an order of significance) that we had not perceived. For example, high in the community leaders perception of issues, was a safe water supply, improved health services, improved sanitation, better transportation links and so on.

While they saw the linkage with population family life issues e.g. in terms of infant/child mortality rates and the need for wider spacing of births, there was a consistent argument that population issues were but one aspect, albeit major, in improving the quality of family and community life.

From all this it was evident that in the education of these groups beyond the school a very different content and methodology had to be developed. Accordingly, we set about the process of divising materials that would have relevance to the population family life issues that youth and adult leaders perceived.

We began in the health, hygiene and nutrition fields using these contexts to attack infant/child and maternal mortality, and to establish the links between these areas and unmanaged fertility.

– In support of the work of the national Maternal and Child Health programme we devised, designed and tested a logo that might identify clinics and materials produced for them.
– The project produced a calendar for distribution to clinics and orientation centres, to institutions where women and girls are involved in some educational programme, (i.e. women's domestic education centres, and family life centres), and organisations involved with the improvement of the income generating skills of women and girls. The calendar is an aid memoir covering the first 12 months of a baby's life and deals with such issues as breast feeding, supplementary nutrition, vaccination and child spacing.
– We have produced a series of 10 picture story books, that can be used by educators with both literate and non-literate adults. The content topics include: Problems of infertility, the virtues of breast-feeding, age, parity of mothers and mortality risks, common pregnancy myths, child and maternal nutrition, the rationale and modern means of spacing births, the value of children, the cost of educating a child, the need to prepare for childbirth and the future.
– We have completed the production and distribution of a series of audio cassette tapes which feature Somali song, poetry and music interspersed with population, family life, health and nutrition related messages.

Our experience is that these Somali devised and based materials can be used both within institutions and without, (with mass audiences) with ease and considerable effectiveness. For a list of materials produced by the project for beyond school audiences see Appendix B.

Nationalization and Internationalization

The population family life project in Somalia, is currently at an interesting stage of development. The staff of the unit call this stage «combined operations» but another vay of describing it might be «programme nationalization». We presently have in the field three mobile teams of staff (augmented by specialist technicians, family life and nutrition educators co-opted from the Women's division of the Ministry) operating at a regional level. Somalia is a nation of 18 regions and the programme of decentralization is designed to cover them all. The objective of this stage of development is the mass vitalization of the in-school and out-of-school programmes in an interactive and integrated way. Mobile audio-visual vans work during the day time out of a regional centre, to reinforce school activities, to involve regional education officers, headmasters, master teachers and subject masters and mistresses within the programme, to supplement teaching and learning with locally made AVA materials film, filmstrip, and video programmes. The aim is to strengthen both methodology and content.

After school hours the mobile vans, and rather different media approaches, are used with adult educators and with the youth and adult audience. Thus, we are attempting to use the total educational resources of the community, those who work with children, and those that work with adults, in a combined way to enhance population awareness on a community basis, nation-wide. To date 9 regional centres have been covered, and project staff appear to be enthusiastic in terms of the response received. Preliminary evaluations of these «combined operations» also appear to be most encouraging.

There are two other aspects of nationalization which may become important in the future, in terms of groundwork done.

There has come into being in Somalia a Family Health Care Association, and the project hopes that this will prove to be a most important organisational structure by which information, education and communication activities might be extended. The project has also been instrumental in the drafting of a new form of legislation to bring into being a High Council governing the Welfare of the Mother and Child in Somalia. Parliament has recently passed the legislation into law, and we are again hopeful that our project might strengthen the work of this body nationally.

Since the Dakar Seminar in late 1983, the project has been involved in an exchange of correspondence and materials with most of the other population education projects in Africa south of the Sahara (and indeed one or two above it). We have ongoing requests for materials and sometimes advice from a number of other nations and regions, from both United Nations programmes (UNICEF, FAO, Unesco) and from programmes operating in the private sector (the refugee programme in the Southern Sudan and the Private Sector Family Planning Programme in Kenya to quote but two examples).

Over the past 6 months we have been assisting other African projects in the training of personnel. The project has been part of study tours organised by Unesco and UNFPA from Tanzania and the Sudan, and we have indications of interest for similar programmes from Upper Volta, Mozambique and other countries. The project in Somalia has benefitted from the interchange of views and experiences and we hope that in some small way, we have been of assistance to others who are initiating new projects or expanding old ones.

EVALUATIONS

The project has informally evaluated, trialled and tested not merely the materials that have been produced, but also the efficacy and efficiency of the methods that we have adopted to train educators both within the formal school system and beyond. We have now devised more formal instruments to evaluate project performance (identical

pre/post-tests) given over specific time intervals to teachers, adult educators, students and adults in general. This is of course, an on-going process and while we now have reasonably complete results from the in-school programme; we have only just begun the base-line evaluations for the out-of-school programme. If however we have to sum the results to date (further analysis may prove us in error), it would appear in overall terms that the educational programmes initiated within the school context show at a six month level: incremental gains in cognition (or understanding) of population family life issues in Somalia of plus 62 for teacher groups and plus 56 for student groups. The corresponding overall average figures for attitudinal shift (affective domain) are plus 68 for teachers and plus 64 for pupils. The attitudes being evaluated relate specifically to responsible parenthood, responsible community behaviour (especially in a health and nutrition context) and those attitudes which relate to positive future planning and more informed population-related decision making.

We have similar kinds of results on pre and post test evaluations of adult groups involved in intensive short course training programmes. Results from the intervention programme with adults from five regional centres are in the final stages of analysis. Positive attitudinal change vis a vis spacing, show highly significant gains (plus 70), and with a broad spectrum of adult educators ideal family size (which is incidental as an objective in our programme) shows an average decline of 2.7 children between pre-intervention and post-intervention testing.

These results may be regarded as tentative but we hope that they are indicative. We expect to be able to evaluate behavioural change in a different way with the adults. We have some evidence that such change is occuring in urban areas. A more detailed report on evaluation should be available early in 1985.

Strengths and Weaknesses

The programme of population family life activities in Somalia has derived its strengths from a number of different sources. Its location within the planning department is a fundamental one. It has enabled us to forge links with other arms of the Ministry of Education, and to groups beyond the school. It has given us access to the political and policy makers, and enabled us to educate them so that they might better support what we are about. We have received, at all times, assistance and encouragement from the Minister, Vice Minister and Permanent Secretary of the Ministry of Education. A further source of strength has been the quality of the project staff, and the extremely low level of turnover. The staff are young and enthusiastic and are prepared to adopt an experimental approach to problems and strategies of initiation and implementation. Finally and by no means least

of all, the project has gained strength because of the support that it has received from its funding agency (UNFPA New York) particularly from its technical and financial divisions. No project can really achieve anything in the field without the support of its executing agency, and although we have experienced difficulties with communications and logistics, we are cognizant of the very sympathetic attention that we have received from both the Population Education Section and the Social Science Section of Unesco. UNDP Somalia has done all that is possible to support our operations in the field.

Like all projects there are weaknesses. We suffer in Somalia because of our isolation, which frequently makes communication within the nation and with the outside world tenuous and difficult. Typical of developing nations is the scarcity of skilled manpower, and so we must train our own specialists (and this is particularly so in the field of educating adults) and our own technicians. Again we are low budget project and this is both a strength and a weakness, it is a strength because it has forced us to innovate in order to discover the most effective way of attaining our objectives, and it is a weakness for there are opportunities that have been dismissed because we lacked the funds to accept the challenge in any realistic way. For example we have the opportunity to appoint permanent lecturers in Population studies to both the Primary and Post Primary Teacher Colleges, but the support salaries are beyond our resources.

And in any programme which is in essence experimental we have had to learn by doing, by trial and error. And in so doing we have made many of the latter, from which we hope we have learnt. Just to indicate some of the mistakes:

– We have sometimes tried to push a concept or strategy not currently acceptable to the culture and society. (A more oblique approach would have yielded better results).

– At times we have underestimated sadly the ability of formally undereducated people to educate. (At village level we have some very fine family life educators who are illiterate).

– There has been occasion when we have stuck to a work plan because it was a work plan, even though it was unworkable.

– Consistently we have had to learn that the «home grown product» is by far the best. For example in the development of teaching aids the most effective context is the Somali language, and the simple home made aid is in most instances more learning effective than any imported product.

– We tried initially to have educators believe that population family life education was something new and exciting. We did much better with the notion that it was but a new way of looking at a lot of old problems.

– We too glibly assumed that what we had taught to teachers would be transferred unsullied to their learners.

– There were times when we tried to do more than proved attainable. We learnt that as we achieved little things pride in achievement grew, and that little by little the unattainable became attainable.
– An there were times when we thought that we could solve a particular problem on our own, when there was on hand the experience and advice of others to call upon. The project in Somalia has benefitted greatly from the wisdom and advice of others both locally and internationally.

CONCLUSION

The National Programme of Population Education in Somalia is now into its fourth year of implementation. We are in the very last stages of institutionalizing our in-school programme. We believe that we have made some significant inroads with Information, Education and Communication activities with youth and adults beyond the school. And very steadily we appear to be becoming more and more of a resource unit to a wide range of other organisations with population family life projects in the field.

We have no great satisfaction, however, with what we have achieved. There is still so much to do in Somalia, if we are to educate a public about population related matters, and responsible population related decision-making, (the population that we serve is currently doubling every 22 years) then we must contine to learn by doing, but learn to do it faster. For time is a luxury that neither we nor this nation can afford.

APPENDIX A : IN-SCHOOL PROGRAMME

List of Materials produced by the Population Education Project

1 – Somalia the last ten years. «A population fact book» 1970–1980.
2 – Family Life in Somalia. «A fact book for teachers».
3 – Learning To Do... Book one. Simple Visual Teaching Learning Aids. A handbook of suggestions for teachers.

Population Education for Somali Primary Schools

1 – Book One: Learning About our Families.	Grade One.
2 – Book Two: The People of Somalia.	Grade Two.
3 – Book Three: Our Community.	Grade Three.
4 – Book Four: The Place where We Live.	Grade Four.
5 – Book Five: The Story of Ali.	Grade Five.
6 – Book Six: People and Food.	Grade Six.
7 – Book Seven: East Africa.	Grade Seven.
8 – Book Eight: The Arab World.	Grade Eight.

Population Education for Somali Secondary Schools

1 – Book One: Biology Population Resources Environment.....Nutrition.
2 – Book Two: Biology Population Resources Environment.....Ecology.
3 – Book Three: Biology Population Resources Environment.....Human Reproduction.
4 – Book Four: Biology Population Resources Environment.....Heridity and Environment.

1 – Book One: Geography Population Resources Environment. «Man's Role in Changing the Face of the Earth».
2 – Book Two: Geography Population Resources Environment. «Insect Pests and Diseases of Africa».
3 – Book Three: Geography Population Resources Environment. «Patterns of Population Distribution in Somalia».
4 – Book Four: Geography Population Resources Environment. «World Population».

Walls Charts (Population Charts) For Somali Intermediate and Secondary Schools

Chart 1. Somalia: Graph Growth rate 1950 – 2000.
" 2. Somalia: Growth rate in months, weeks, days and hours.

Chart 3. Somalia: Decline in mortality 1940 – 1990.
" 4. Somalia: Rationales for high fertility.
" 5. Somalia: Reasons for decline in mortality.
" 6. Somalia: Age structure of Population.
" 7. Somalia: Dependency ratio.
" 8. Somalia: Distribution of Urban Population.
" 9. Somalia: Rationales for R-Urban Population.
" 10. Somalia: Consequences for Mogadishu.
" 11. Somalia: Consequences of Rapid Population Growth Food.
" 12. Somalia: Consequences of Rapid Population Growth Water.
" 13. Somalia: Consequences of Rapid Populationg Growth Schooling.
" 14. Somalia: Consequences of Rapid Population Growth Health.
" 15. Somalia: Consequences of Rapid Population Growth Fuel Supplies.
" 16. Somalia: Consequences of Rapid Population Growth Desertification.
" 17. Somalia: Consequences of Rapid Population Growth Environmental Pollution.
" 18. Somalia: Population Projection to Year 2068 given 3.2 growth rate.

APPENDIX B : OUT-OF-SCHOOL PROGRAMME

Flip Charts: Picture Story Books

1 – Infertility.
2 – Breast Feeding.
3 – Folk Myths Associated with Pregnancy.
4 – Preparing for a Family.
5 – Timing of the First Birth.
6 – Birth Spacing.
7 – Scientific Means of Spacing.
8 – Costs of Educating a Child.
9 – Family Size and Income.
10 – Maternal Age and Birth Spacing.

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CALENDAR

The Health and Welfare of Mothers and Babies (The First 12 Months of Baby Life).

Workers and Their Families in Somalia.

A Family Welfare Education Handbook.

Learning to do ... Book Two. A Handbook of suggestions for Adult Educators in Somalia.

F.A. AKINLAYE*

POPULATION EDUCATION IN AFRICA – THE CASE OF NIGERIA

In the awareness of the large young population in Nigeria, and the high priority enjoyed by education in the country's series of development plannings – from the first 1962–68 to the fourth 1981–1985 respectively, and the felt-need for population education for the country, the Nigerian Educational Research Council (NERC) undertook a short-term exploratory project with assistance from UNFPA and Unesco to formulate a comprehensive programme on population education for both the in-school and out-of-school sectors of the country's education system in 1981.

A team of Nigerian experts drawn from different academic disciplines and fields of specialization – ranging from Government Policy Planning, Social and Economic Research, African Culture and History, Adult Education, Demography and Census Commission, Social Studies and Geography, Manpower and Environmental Sciences – were assembled to compose the Experts Steering Committee.

The Committee sought among other things to:
– Define population education within the Nigerian context;
– Identify its goals; and
– Determine the major programme areas which would become the foci of a population education project for Nigeria.

The final draft which emerged from the deliberation of the Committee represents the Federal Ministry of Education's (through NERC) attempt to respond to a need that has been felt and now articulated in no uncertain terms. The draft also finds an echo in one of the major recommendations of the UNFPA – sponsored «Needs Assessment Mission for External Assistance to Nigeria» (1980) ... promotion of awareness and understanding of population concepts as they relate to economic and social development.

The Expert Steering Committee which prepared the Population Education project proposals, defined population education as:

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«an education process which provides for a study of the population situation in the family, community, nation and the world, with the purpose of developing in the citizens of a more rational and responsible attitude and behaviour towards improving the quality of life now and in future» (1981).

From this simple definition, the general and specific objectives of the programme emerged. In this conceptualization of population education with a view to developing an educationally sound programme, the Committee agreed that the ultimate goal is to assist the citizens in making more informed population-related decisions, and in acting on these decisions in a way that would enhance the quality of life.

THE OBJECTIVES OF THE PROGRAMME

The Population Education Programme for Nigeria seeks in general to sensitize individually – both those who belong to the in-school and out-of-school sectors – on the consequences of their population actions as prerequisites toward the improvement of their quality of life. In particular, the Programme is an attempt to institutionalise population education as an integral part of the educational curriculum at all levels for both the in-school and out-of-school systems. In doing so, the programme seeks to expand the existing stable curricular contents for these two sectors of the education system so as to effectively increase the sensitivities of the individuals to the consequences of their population behaviours.

The need to integrate population education content into the curricular of educational institutions, and into the programmes of education for the out-of-school youths and adults; and into pre-service and in-service programmes for training personnel for the broad spectrum of occupations in the country, would involve working with people in an essentially ameliorative role – teachers, social workers, nurses, community development workers and agricultural settlement workers – for example, arises principally from the fact that whether the objective is the welfare of the individual, family or of the whole country, an enlightened awareness of population-related issues culminating in social action and rational personal decision-making in accordance with such awareness, would as envisaged, constitute to the long-term achievement of these objectives. Conversely, lack of such awareness, and the increased probability of nonchalance as well as of irresponsibility, could wreck the programme and aggravate an already unsatisfactory situation.

Specifically, therefore, the programme seeks to increase awareness and understanding of:

– Basic demographic processes as applied to one's family, community (village), the country and the world;

– Effects of population change and growth on the social, economic and environmental life of the society;
– Population and family size pressures on quality of life factors, such as food and nutrition, health, education, housing, employment, human rights and social justice;
– Dynamics of population that the individual affects through his/her personal behaviour, age of marriage, birth of first child, spacing of children, rural-urban migration, and those dynamics of population that affect him/her as recipient or member of society – population growth rates, dependency burdens, socio-economic conditions, etc.

By so doing, the programme hopes to assist the Federal Ministry of Education in achieving one of its educational objectives – as stated in the National Policy of Education (1981) – of reforming the contents of «general education» to make it more responsive to the socio-economic needs of the country.

From these objectives, it becomes crystal clear that population education in Nigeria is not indoctrination or propaganda. It is distinctly different from just birth control, family planning communications or family planning education or sex education. It is not even a programme designed to persuade people to have a particular family size, either large or small, but an education related more to the many dimensions of socio-economic, cultural, religious and political life that determine the human conditions in the country.

Nigeria's over-riding concern has always been the improvement of the living conditions of its people using all available resources – human and material – with which the country is endowed. The resource-population equation is intrinsically connected in that the resource base of a nation must expand correspondingly and significantly too as the population base grows. Thus, to develop a comprehensive plan to fulfil the country's needs for a fair and equitable distribution of food, water, housing, power, health, transport and tele-communication, employment, social security services, the relationships between population growth and socio-economic development, must be well understood not only by policy and decision-makers, but also by the generality of the whole population.

Inherent in this population education programme, therefore, is the concept that the citizen is not presented with a ready-made course of action and asked to accept it. The course of action which he chooses is developed during the process of exposure and coming into contact with the realities of population parameters, and understanding the problem, in its inter-relationships with the various factors that can change the national or the individual quality of life.

To achieve the above goals, the programme identified five major areas around which specific activities are developed. These activity areas are:

– Population research and evaluation;
– Curriculum development;
– Training of teachers and other personnel;
– Production of supporting materials (teaching and learning aids); and
– Population awareness promotion.

The activities which evolve from these areas directed by sets of specific objectives, provide the programme for population education for the country.

The NERC views research as the core component of the project as it provides the basis on which most of the decisions and activities are to be prosecuted. Research results serve as guidelines in the development of the curriculum, in evolving the teacher training programme, in producing the teaching and learning aids, and in providing the basis for a sound population awareness campaign to create a favourable climate toward population education.

In this vein, population education, to be effective in Nigeria, rests on the teachers – their preparation, skills and commitment. It must, therefore, begin with them. The project views teachers and other personnel training as the logical area of activity in which population education can, within the Nigerian educational context, best be introduced.

Having successfully itemised and drafted the curriculum contents for teacher in-service training, and the production of the teaching and learning aids, further progress has been temporarily hampered by delays in the research reports which invariably form the bedrock for most of the activities of these programme areas.

LEVELS OF INTEGRATION AND INSERTION

The goal of population education is essentially the function of the nation's education systems, as it is a process of assisting an individual to acquire certain knowledge, understanding and to develop certain attitudes, values and skills. In view of this, population education programmes were designed to be integrated into, and to use the methods and approaches of the education systems of which they are a part.

In-School Sector

In Nigeria, the large majority of the in-school population is at the elementary school level. It was accepted that if population education is to reach the largest number of pupils in the in-school sector, it should be introduced at this level. In Nigeria, pupils drop out of school as they go up the grade, and the number of pupils grading into secondary schools is only a small fraction of those in the primary

grades. If the introduction of population education is postponed until secondary stage many will not receive it at all in school. Their chances of acquiring sufficient information about population matters out of school would be limited, as many of them would not have attained an adequate standard of literacy. Moreover, in the villages and small towns in which they are likely to reside, opportunities of exposure to the electronic and print media out-of-school programmes may be relatively restricted. On the other hand consideration was given to the fact that the primary school child is usually far removed from the years in which he/she will be called upon, to take decisions regarding his/her fertility behaviour. It is however, believed, if reproductive behaviour of these potential fathers and mothers is to be influenced, they will need to be repeatedly exposed to population concepts as they progress through the elementary school years.

The new primary school social studies curriculum therefore, provides a great deal of flexibility for the introduction and integration of the new material, as there is no great concern with examination at this stage.

Efforts have been specially concentrated on the secondary and teacher education levels. Being older and more mature than the preadolescent, secondary students and trainee-teachers can grasp population education concepts in greater depth. These levels have greatly facilitated the preparation of resource materials and texts necessary for the in-road of population education.

Another additional important point favouring the early input at the secondary and teacher education levels is that these cohorts include future potential teachers, leaders of opinion, and community decision-makers, who would soon be working with youngsters, in youth clubs and societies, at all age levels in both rural and urban settings. The leadership potentials and the multiplier effects of these groups are particularly high in rural areas where both the Federal and State Governments require teaching personnel to begin their careers.

The basic approach taken in introducing population education concepts in the curricular of the primary, secondary and teacher training institutions of the in-school system is the integration approach. This involves preparation of a teaching unit to be added to an expanded existing unit in the course syllabus of the subject area which has been selected as the carrier of population education contents. The carrier-subjects selected for the integration of population education units into the curricular of secondary and teacher training institutions are social studies, general sciences, mathematics, home-economics, health, physical education, geography and agriculture.

In view of the fact that secondary and Teacher Training levels' enrolments are low, the number of teachers required for introducing population education concepts is equally and relatively smaller than

the numbers to be trained and re-trained through in-service programmes for introducting population education at the primary school level. There is no doubt about the appropriateness of introducing population education at the levels of secondary and teacher education, since whatever insight they have gained at the primary level, would come into sharper focus and meaningful for decision-making processes as they are a handful of years away from the time when they would be making decisions regarding their marriage and reproduction.

Out-of-School Sector

In accepting the importance of cultural and socio-economic development contexts, within which population decisions are made to population education concepts and the Nigerian National Development plans, it was maintained that population education for out-of-school target audience acquire more meanings and relevance when interlinked with the areas that preoccupy or interest the learners or are viewed as a solution, if not remedy to day-to-day problems. It is for this reason that population education concepts have been planned to be integrated into various out-of-school education programmes including: adult education, literacy classes, labour training and education, agricultural extension classes, food and nutrition campaigns, mother and child health cares, environmental education and rural development programmes.

In order to make this educational renovation have impact on population dynamics, emphasis will be placed on underpriviledged groups, such as the rural youth, girls, school drop-outs. Semi-literates and the illiterates or those youths and adults who never enrolled in the schools, and the young urban migrants whose population behavioural problems are quite different from those of their counterparts in the schools.

POPULATION EDUCATION IMPLEMENTATION STRATEGIES

The Nigerian Educational Research Council (NERC), as a parastatal of the Federal Ministry of Education, is the implementing agency which sees to the day-to-day administration of the project's five major components, as mentioned earlier. These five major programme areas address themselves in varying degrees to the two major types of audience: the in-school and out-of-school sectors.

To effectively implement the programme, the NERC set up a national population education committee (PEC) which acts as the overall committee to ensure effective coordination and control of all the activities. In composing the PEC, a number of key ministries and institutions recognized for possessing the needed inputs or expertise

were compiled to form the committee. Included in the commitee are the representatives from sixteen ministries and agencies among whom are:

– The Federal Ministry of National Planning and Economic Affairs,
– Federal Ministry of Education, – (Planning and Adult Education Division),
– Manpower Board (F.M.N.P.),
– National Population Commission,
– Nigerian Institute of Social and Economic Research (NISER), University of Ibadan,
– Planned Parenthood Federation of Nigeria,
– Faculty of Social Sciences (Universities of Ibadan and Lagos),
– Faculty of Environmental Sciences and Dept. of Geography – University of Jos,
– Department of Educational Planning and Administration – University of Ife,
– Department of History and Centre for Nigerian Cultural Studies, A.B.U. Zaria,
– Faculty of Education – University of Benin,
– Centre for Educational Technology – Ahmadu Bello University (A.B.U.), Zaria,
– National Commission for Unesco,
– Unesco–UNFPA, and
– Nigerian Educational Research Council (NERC).

The PEC then set-up five sub-committees, members of which were drawn from specialized fields corresponding to the five major programme areas. The Chairmen of each of the sub-committees were selected from the members of the PEC. The functions of these sub-committees are to implement all the mapped-out strategies and the operational plan of activities under each programme area so as to ensure a well orchestrated and synchronised implementation schedule.

The NERC then set up a network of designated institutions, for example, universities, teacher training and research centres, already in existence with staff and resources to assist the council in implementing some of the activities through the PEC. This collaborative network of institutions were given specific tasks on the basis of their area of competence. Such assignments included specific population researches, development of learning and teaching aids, evaluations, trial-testing and validation of curriculum and texts developed for the programme.

Out-of-School Strategy

The NERC is conscious of the religious, cultural, economic and political complexities obtaining in Nigeria, and the probability that people will confuse population education with family planning, sex

education or birth control education. It was therefore pertinent to create a climate of acceptance for population education as a prerequisite to its introduction into the curricular of educational institutions in the country. The support of political leaders, opinion leaders, educational leaders and mass media men must be enlisted; without their support, it was realised, the programme may not get-off the ground.

In pursuance of this strategy, and the desire for establishing dynamic communication link and positive awareness about the project in respect of policy-makers and the literate public – «a population education public notice» was published in a number of national dailies in December 1982. The impact of the notice on the Nigerian population, has, to say the least, been positive and encouraging.

POPULATION AWARENESS PROMOTION CONFERENCE

In preparation for this conference, the Population Awareness Promotion Subcommittee designed the population education LOGO, the television and radio jungles, and the television/radio plays meant for transmission over the mass media network during the one week conference.

Having defined the modalities of approach and the strategies for reaching the out-of-school target audience, the Population Education Committee proposed to hold the Population Awareness Conference, to be declared open by the President or his representative early in 1984, as part of the strategies of sensitizing the political leaders, the government top-ranking functionaries on the issues of population growth in Nigeria.

The motivational, persuasive and enlightenment programmes previously endorsed by the last civilian regime were nullified by the new reformist military government. Modified modalities for reaching the government functionaries of the new regime are being explored. Substantial inroad has been made in this direction, and with the current contributions from the press releases on the status of the population in the country, a comprehensive purposeful national conference may be endorsed again by mid-1985. With regard to the out-of-school system, the process of institutionalization of the programme depends wholly upon NERC's capacity to continuously involve the political and administrative decision-makers in every strategy designed to persuade, that the innovation has a national relevance and benefit, and to bring about changes in attitudes.

STATE COMMITTEES ON POPULATION EDUCATION

For the purpose of securing a full and adequate coverage of the whole country, and the strategy necessary for reaching the out-of-school youths; and adults in the rural areas of each of the nineteen

states of Nigeria, corresponding state population committees were established to implement the state programmes. Members of these committees were drawn from the state ministries of education and information, state radio and television, state newspapers and representatives of the higher institutions.

Supportive material aids will be provided by NERC as soon as the National Population Education Conference is launched. Since the success of any project designed to benefit whole population depends, to a large extent, on the creation of sound public awareness and support from the top as well as the grassroot, it is strongly believed that through the state committees various enlightenment activities, information and knowledge of population issues will reach a wide audience in the local languages of the states.

In view of the requirements of the five major activity areas and the state population education committees, the NERC set up a clearinghouse in its library in 1982 to serve as appropriate storage and retrieval of relevant support materials already acquired from the United Nations agencies, the regional offices of Unesco in Asia, Africa, Latin America and higher institutions with similar population education programmes in America and Asia.

Administration

The Council's educational programmes including the population education project are administered by the Executive Secretary/Executive Director, assisted by trained personnel who are specialists in their own respective fields and Unesco technical adviser to the projects. The Council derives its funds for all these projects directly from the Federal Government of Nigeria through the Federal Ministry of Education.

The world-wide economic recession of the past years, and the tight budgetary policy of the government has affected the pace of programme implementation since 1983. It is envisaged that the present financial situation may improve substantially by 1985. In view of the settings of the project and what has been achieved to date, the current limitations in the project schedules are only temporary, as the NERC is strongly committed to the successful implementation of this UNFPA-assisted project.

CONCLUSION

The population education programme for Nigeria falls within the national priorities as contained in the Fourth National Development Plan (1981–1985). Despite the various constraints that the project has to face, the NERC attaches great importance to population education in its overall programmes, and after UNFPA assistance would

have ceased, the council shall pursue, through its research programmes, population education researches on a continued basis and undertake international comparative studies to enrich the programme. It shall also continue, through the teacher training colleges, the training and retraining of teachers in population education. The Council shall also ensure, through appropriate review of curriculum and other materials which it undertakes on a regular basis, that population education concepts are fully incorporated into the textbooks and other curriculum materials for use in schools. And the Council shall continue, through its Social and Creative Studies Department, to provide the needed financial and resource inputs to population education activities.

The NERC hopes that through this population education programme, all the decision-making organs of the government would be sensitized on the interrelationships of demographic processes and socio-economic development of the nation. It believes that the education of one generation is, to a large extent, the education of successive generations. Our capacity and efforts to educate the present generation with regard to their population behaviours, to social and economic development, to bringing about a new vibrating social and economic order and a better quality of life in Nigeria, will be reflected in the wellbeing of the country in the more distant future.

A. UKAEGBU and J. KYAZZE*

UNESCO EXPERIENCE IN POPULATION EDUCATION IN AFRICA SOUTH OF THE SAHARA

INTRODUCTION

The concept of population education

The term «population education» may still sound new to certain circles of the public even though activities in this field began in the early 1970s and have since increased in quantity and quality. At the onset of activities, Unesco defined population education both in terms of the major components of the field on which there was sufficient consensus, and in terms of goals and objectives. Thus, from the viewpoint of the first perspective population education was defined as «an educational activity which:

– Is part of a total learning process;
– Is problem-centred;
– Derives its content from population studies – concerned primarily with the population-related interactions of individuals, families, communities and nations;
– Is aimed specifically at improving the present and future quality of human life (1).

From the viewpoint of objectives and goals, the general goals of population education were identified thus:

> «To enable learners to acquire knowledge, skills, attitudes and values necessary: (a) to understand and (b) to evaluate the prevailing population situation, the dynamic forces which have shaped it and the effect it will have on the present and future welfare of themselves, their families, communities, socie-

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Disclaimer: The opinions expressed in this paper are those of the authors, and not necessarily reflect those of Unesco.

(1) Unesco, 1978: *Population Education: A Contemporary Concern. Educational Studies and Documents* No. 28. Chapter III pp. 35 – 41.

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ties, nations and the world; (c) to make conscious and informed decisions, and (d) to respond (either by an intention to act or by an action itself) to population situation and problems in a conscious and informed manner» (2).

Recent Unesco publications on the subject of population education have tended to repeat the above definitions, especially the latter (3). Thus, we can summarize these definitions by viewing population education as an educational response to contemporary population issues and problems affecting social, economic and political development and progress. The general goals of population education are to involve learners in a learning process that will enable them to broaden their awareness and understanding of population-related issues and to develop in them appropriate skills and attitudes to define and analyse these issues so that they will be able to make rational decisions and behave in ways which are personally meaningful and socially desirable.

UNESCO MANDATE FOR DEVELOPING POPULATION EDUCATION

As the meeting point of international concerns in education, Unesco has since its creation directed its education programme to educational policy and planning, the preparation of teachers and to the improvement of the content of education. With respect to the field of population education in particular, some of the major decisions of the General Conference of Unesco may be cited to show Unesco mandate and orientations.

Within the framework of the Resolution 5.21, the General Conference at its 15th session held in 1968 entrusted the Unesco Secretariat with the responsibility of developing a population programme in three sectors: Education, Social Sciences and Communication (4). In respect of population education, the 18th session of the General Conference in 1974 expressed Unesco policy in this field as follows:
– To promote through education and information, a wider awareness of the nature, causes and consequences of demographic trends;
– To assist Member States, on request, in implementing their national programmes for study, research, education and information on popu-

(2) Ibid. pp. 35–36.
(3) See, for example, Unesco 1983. *Preparing Teachers for Population Education: A Handbook* ED/83/WS/33, pp. 7–8 (2) Unesco Regional Office for Education in Asia and the Pacific, 1981. *Population Education in non-Formal Education and Development Programmes: A Manual for fieldworkers*, Bangkok, Thailand, pp. 3–4.
(4) See, Unesco: General Conference of Unesco, 1968, Resolution 5.21 of the 18th Session and 1.141 of the 19th Session.

lation problems and in the training of personnel specialized in these activities.

Then the 20th session of the General Conference in 1978 elaborated on the role of Unesco by:

– Authorizing Unesco to undertake activities contributing to the development of knowledge relating to population phenomena and of greater awareness of the issues involved; and

– Inviting Unesco to promote, develop and strengthen interdisciplinary population education programmes both in and out of school, at national, regional and inter-regional levels, and to have recourse to all possible sources of extra-budgetary funds (multilaterial and bilateral) for the implementation of this programme, particularly the United Nations Fund for Population Activities (5).

In recent years, Unesco policies have emphasized integrated policies for the training of the various categories of educational personnel and the promotion of inter-disciplinarity in educational content, methods and techniques.

A similar emphasis has been laid in the Draft Programme and Budget for 1986–1987 which says: «In the thinking and training activities proposed, the emphasis is placed on solutions to the problems involved in achieving integration, balance and relevance in the content of education, and on the definition of skills and knowledge necessary to all members of a society. A special effort will be made to facilitate integration – in school syllabuses and in out-of-school education programmes – of content relating to certain specific problems such as population education, nutrition, environmental education and preventive education concerning the use of licit and illicit drugs, all in the general context of education for quality of life» (6). These mandates – dynamic and sensitive to the wishes of the Member States for educational reform – have shaped and will continue to shape programme content in the African region in the coming years.

Programmes and Strategies

A major early strategy adopted by Unesco to implement these mandates in the African region was to establish the Regional Sectoral Programme in Population Education in the Unesco Regional Office for Education in Africa in Dakar, Senegal in the early 1970s. In cooperation with the United Nations Fund for Population Activities, Unesco set up the Programme in 1975 with certain objectives which included:

(5) Unesco, 1979. Approved Programme of Budget for 1979 – 1980 Paris (February), page 138.

(6) Unesco, 1985. General Conference 23rd Session, (Sofia) *Draft Programme and Budget for 1986–1987*. Vol. 1 page 46.

– The promotion of better knowledge of population phenomena in the African region and of their implications on social, economic and cultural development at the national, family and individual levels;
– The provision of technical/advisory support upon request to Member States in the region in assessing population needs, designing programmes and preparing project documents for submission to funding sources; and
– Strengthening of regional, sub-regional and national self-reliance through the organization of a regional network of resource persons, regional workshops and seminars, study tours and fellowships for key personnel of country programmes.

Following these objectives, the preoccupation of Unesco with respect to population education in the African region can be classified into five interrelated areas, namely:
– Training of key national project personnel in population education;
– Research and elaboration of prototype instructional materials for adaptation to country's specific needs;
– Technical and advisory support to country's projects (including countries desiring to develop new programmes);
– Collection and dissemination of instructional materials and innovative ideas; and
– Promotion of exchange of information and experience among country programmes in the region.

With regard to the specific content of population education programmes, Unesco is aware that population issues and problems are often deeply embedded in people's traditions, values and sensitivities. Therefore, Unesco does not prescribe content for Member States. On the other hand, Unesco continues to encourage them to define their population needs with due consideration for their socio-cultural situations and sensitivities. Unesco encourages them to decide on:
– The objectives of their population education programmes;
– The content of their programmes;
– The target population for their programmes; and
– The mode of introducing the programme into their educational systems.

Nevertheless, Unesco has learned through cross-cultural experience from Africa and beyond that the content of population education is interdisciplinary by nature. It draws its educational components from a wide range of disciplines and professional fields to be able to deal with the complex interactions between population process and other developmental variables related to the concrete needs, situations and priorities as expressed by the Member States. Furthermore, one of the main characteristics of Unesco programme in this field is the emphasis placed on integrating:

– The findings of micro and macro levels analysis to attempt to make explicit the reciprocal impact of individual and family level population bahaviour and the prevailing social, economic, cultural and environmental structure of the community; and
– The contents and methods of such renovative fields as environmental education, development education, nutrition education, family life education and sex education. Another important feature of Unesco's programme is the viewing of population education and the related fields in the perspective of lifelong education covering school and out-of-school audience. Upon request, Unesco makes available the benefit of its experience in these areas to Member States.

In the early 1970s and in pursuit of the mandate at the time, the Regional Sectoral Programme for Population Education developed its activities in two main sub-sections – population education and population aspects of educational planning. These two aspects were considered as complementary in so far as they enable the idea of «population» to be grasped by educational programmes both in terms of its content and in planning dimensions.

In recent years, Programme development at the regional level has also been influenced by such factors as:
– The outcomes of regional and sub-regional seminars organized by the Regional Sectoral Programme; and
– Qualitative changes in the programme brought about by: more regular contacts with national and other agencies; relative stability and increase in the posts of Regional Advisers in population education; increased technical support of Unesco headquarters; and the outcomes of UNFPA population basic needs assessment missions to Member States in which Unesco staff in population education have regularly participated. As a result of the above-mentioned seminars and qualitative changes, Unesco has gained over time a clearer perception of country population situations, their priority needs, and appropriate strategies for addressing those needs through education.

SUPPORT FOR COUNTRY PROGRAMME

Unesco support for country programmes in population education takes several integrally related forms. The most common types include:
– Technical advisory services;
– Training of national population education leaders;
– Research and instructional materials production and distribution;
– Gathering of information, documentation analysis and dissemination and
– Project management.

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1 – *Technical advisory services* take several forms and may be initiated by the Government of a Member State or by Unesco or by the funding agency, (frequently the UNFPA). The services may be provided by Regional Advisers and/or other technical staff of Unesco at the preparatory and/or implementation stages of a country programme or at both stages. In the past, Unesco in collaboration with other agencies, has provided advisory services in:

– Population basic needs assessment;

– Programme development or Project forumulation;

– Specific aspects of programme implementation such as in the recruitment of international personnel; arrangement of sub-contracts; organization of training courses locally and abroad for national programme personnel and teachers; preparation of strategies for programme development; elaboration of instructional materials; evaluation of programme activities; and in the procurement of equipment necessary for programme implementation. In recent years technical advisory missions have acquired a comanding position among the kinds of technical support which Unesco provides to country programmes. This is the outcome of rapidly increased interest among Member States in the region and the demand for population education assistance.

2 – *Training of national population education leaders* is a top priority activity for Unesco. The rational is to develop a dependable national capacity for self-reliance when external aid is terminated. Moreover, the field of population education being relatively new, very few Member States in the region ever have skilled personnel at the beginning of their country programmes. The modalities of training may vary from one country to another depending upon the available options and choices made by the Government. However, the most common modalities have included the organization of study tours to established programmes in other countries; fellowships to overseas universities for post-graduate studies in population education; block training for several weeks in an overseas training centre; and on-the-job training provided by a resident international consultant, or a short-term non-resident consultant, or other external or local resource persons. In addition, regional and/or sub-regional consultative meetings have tended to provide useful teaching/learning opportunities for the participants. Training activities organized by Unesco aim at preparing national population education leaders to become national key resource persons, the trainers of trainers. In this way the training received by this core group would have multiple effect thereby increasing the probability of institutionalization of the programme.

3 – *Reseach and instructional materials production and dissemination* Unesco is aware that many of the knowledge needs of population education are being investigated by researchers in a variety of fields. This does not, however, mean that all the basic research needs of popula-

tion education are being met. Thus Unesco, in collaboration with other agencies, has since the 1970s embarked on specific applied, action-oriented research concerning content and methodology of population education. The global experience and publications of Unesco in this field have been placed at the disposal of country programmes in the African region to assist them in developing their country-specific instructional materials.

Among the materials developed globally by Unesco and which have been widely distributed include the following:

– *Population Education: A Contemporary Concern.* Education Studies and Documents (No. 28).

– *Study of the Contribution of population education to educational renewal and innovation in El Salvador, The Republic of Korea, Philippines and Tunisia.*

– *Socio-cultural case studies for population education in Morocco, Peru, Rwanda and the United Republic of Tanzania.*

– *Preparing Teachers for Population Education: A Handbook.*

The Regional Sectoral Programme in Population Education in Dakar has encouraged the production of similar case studies in five West African countries, namely Burkina Faso, Guinea, Ivory Coast, Mali, and Senegal. A sample audio-visual introductory course for preparing teachers in the basic concepts of population education has also been developed. This material is called, *Learning About Our Population*, and it has an accompanying Workbook for students. The Programme has also encouraged the preparation of annotated bibliographies on:

– studies in family life and

– institutions working in the field of population/family life education in the region.

In the same connection Unesco has assisted a country programme (Sierra Leone) in the preparation and identification of a funding source as well as in the printing of population education textbooks for secondary schools.

4 – *Information gathering, documentation analysis and dissemination* constitute important complementary country programme support activities undertaken by the Organization. The increased interest for population education in the region in recent years created new needs and demands for the Programme. Unesco responded by proposing the establishment in Dakar of a Regional Clearing House in population education which would address the information and documentation needs of the country programmes. The search for funding assistance for the Clearing house is in progress. The Programme tries to meet minimally, at least, the needs of country programmes in information and documentation concerning population education with the support of Unesco Headquarters and UNFPA.

5 – *Project Management*. This exercise englobes the total sum of activities concerning the conception, implementation and evaluation of country projects. In pursuance of its role as executing agency of Member States national or multi-national projects falling within its areas of competence, Unesco undertakes the management of national population education projects in conjunction with the beneficiary countries; and in consultation with the financing agencies. Since the mid-70's Unesco's experience in this respect has involved the following activities:

– *The Preparation of project documents* provide the basis for the search for funds, define the objectives, activities, required inputs and expected outputs of the project as well as the framework for the project's implementation. In this connection, Unesco has often assisted governments in negotiating with the financing agencies for the securing of funds for the projects.

– *Recruitment of technical international personnel*. In line with the national personnel training programme and orientation presented under item 2 above, Unesco has largely depended on the local personnel as project managers for the implementation of the population education project activities in the Region. This personnel, generally consisting of directors of the host institutions or heads of curriculum units; are usually assisted by international technical short term consultants recruited by Unesco for specific tasks like, the running of training seminars, the preparation of teaching/learning materials, etc.. Entrusted with the management of population education projects, in addition to their institutional regular duties, this national personnel is in some cases remunerated from the project funds for the services rendered to the projects. This approach, it will be noted, differs from the one applied in the case of most projects in other areas of education financed by the World Bank, Regional Development Bank, UNDP etc. where the day-to-day management is generally entrusted to expatriate personnel residing in the country for relatively long periods. As mentioned under 2 this approach is likely to render the national personnel more directly responsible for the programme right from the start and hence making its integration in other national activities easier. It remains to be seen whether this national personnel will keep up the same enthusiasm towards the programme at the end of the project and after the withdrawal of the extra remuneration provided within the life time of the project.

– *Equipment procurement*. Through its international suppliers Unesco has over the years furnished the projects with the equipment required for the execution of their set activities. This equipment has varied from vehicles, reproductive machines, audio-visual equipment to documentation and soft ware supplies. On some occasions, local purschases have been authorised for quicker delivery purposes and where the cost is high for such purchases it is justifiable.

– *Organization of training programmes*. This is another important aspect of the activities undertaken by Unesco during the implementation of the projects. In the case of population education, the training has in most cases been organized in the form of national seminars, study visits to established centres or to other similar projects abroad and through *ad hoc* short term courses organized at estblished universitites mainly in Europe and in the United States.

– *Project monitoring*. This has been and continues to be one of the most important aspects of Unesco's role in the management of population education projects. In the absence of Unesco technical personnel resident on the project site, frequent monitoring visits are organized to the projects and undertaken by the regional advisers based at BREDA, Dakar or by programme specialists responsible for operational programmes in education. These visits have been complemented by occasional visits of national project coordinators to BREDA and to Unesco Headquarters in Paris for mutual briefing sessions or exchange seminars. Regular correspondence between the national directors and the Unesco staff as well as periodic progressive reports received from the projects have also constituted useful monitoring instruments.

PROBLEMS ASSOCIATED WITH PROGRAMME IMPLEMENTATION

Population education programmes share similar problems with other programmes funded by external sources. Some of these general problems may be traceable to the requesting (and recipient) governments; some to the funding agencies, and others to the executing agencies. For example, delays are common at all levels: a government may delay the submission of a project request or in the selection of the proposed international consultants; the funding agency may delay the approval of a project request or the release of funds; and the executing agency may delay in hiring international consultants or in producing equipment. Thus a realistic workplan will normally anticipate delays and make generous allowance for them.

With respect to population education, one specific problem of most country programmes is the heavy reliance on a single external funding source, the UNFPA. With increasing numbers of requests from Member States, the dependence on UNFPA cannot but pose problems of reduced size of funds. In turn, there are certain operational constraints, such as the difficulty of assigning long or medium term international personnel to the project, piece-meal programming and ultimate weak programme impact.

CONCLUSION

The experience of Unesco in developing and implementing population education at both the formal and non-formal levels spans over fifteen years to-date. During these years and through interaction with its Member States and other agencies working in the population field, Unesco has gained a deeper insight into the critical population issues and problems and the ways these are perceived by the Member States. Simultaneously, Unesco has sought to apply its wealth of experience in the educational field to address the population-related issues and problems. However, as in all new fields of learning, there are always unexplored horizons and new challenges. Unesco's approach to these problems is through the encouragement of research and co-operation at the country, regional, global and agency levels.

P. GARZON-CASTANEDA, H. POUR, A. SIMBEYE*

POPULATION EDUCATION AND ILO: AFRICAN PROGRAMMES OF POPULATION AND SOCIAL AND COMMUNITY WELFARE EDUCATION

When in 1960, the United Nations proclaimed the first development decade, economic growth was to be the vehicle of development and hence, lead to the creation of employment, and improved distribution of social incomes and profits. The transfer of technologies and resources of rich countries was, for its part, to secure a sort of restoration of balance. The green revolution emerged moreover as one of the solutions to food problems in the world. However, in spite of a relative improvement of living conditions in some developing countries, the results were to be disappointing. Development planners and experts were accordingly going to change strategies, cease to consider growth as the exclusive factor of development and take account of other aspects as indispensable factors of this process. This is how health, education, nutrition and other matters concerning population began to be taken into consideration.

REASONS FOR ILO'S INVOLVEMENT IN POPULATION ISSUES

To those who wonder why an organization like ILO critically examines population problems we shall reply that it would not be conceivable that ILO which handles all that relates to the labour and employment of men and women, should envisage only those aspects of labour and employment without considering the overall aspect of their relations with life itself and, inversely, the relationships between living conditions and the ways to cope with them, inter alia, through labour.

How, again, could ILO genuinely intervene in the labour world without taking account of what is going on – or not – at the family and community level and the influences that the very life of workers

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has on the manner in which they work? Finally, how could ILO ignore the effects that general policies have on individuals in their duties as workers and not attempt both at the macro- and micro-economic levels, to reconcile national interests and those of individuals within their family structure? Around these major axes of intervention drawn by these questions revolves the complexity of networks between labour, resources and needs, ignorance and destitution, the capacities to change living conditions and the means to achieve them. It is at these crossroads that all components on the basis of which ILO designed its population education programme meet.

Let us now turn to a bit of history ... The acknowledgement of the influence of demographic factors on employment was explained in Recommendation No.122 of the 1964 International Labour Conference: Countries in which population grows rapidly and more specially, countries where it already exerts a great pressure on the economy should study the economic, social and demographic factors which affect population growth with a view to adopting economic and social policies likely to ensure a better balance between the growth of employment possibilities and the expansion of labour.

Only a few countries had then adopted measures influencing rapid population growth. At the end of the 1960s, population issues were considered as integral parts of development strategies. United Nations Specialized agencies in general and ILO in particular, adopted policies in this direction. Thus, in 1968, ILO's Governing Council decided to expand the mandate of the Organization in order to enable the Organization to help developing countries to cope with their population problems according to a plan containing specific activities:

– The promotion of educational and information activities in the fields of population and family planning at different levels and particularly, within the framework of educational and social welfare programmes undertaken by workers' organizations;

– A research policy directed on demographic aspects with a view to taking social policy measures in certain fields such as employment and social security;

– An action with a view to encouraging the participation of the social security and health services of firms in the promotion of family planning. During the 1970s, two major aspects governed ILO's population activities:

1 – Increasing awareness among trade union leaders, heads of cooperatives and enterprises with regard to the implications of population factors (growth, size, distribution, structure by age and sex and migration) on employment, standard of living and the social welfare of workers;

2 – Pursuing within the World Employment Programme, research on the linkages existing between demographic variables, employ-

ment and the labour market within the framework of activities concerning the creation of employment and incomes and the eradication of poverty.

The World Population Conference held in Bucharest in 1974 adopted for its part, a plan of action based on three ideas:

– The «population» variable cannot be dissociated from other crucial factors of development;

– Demographic variables have an active role which influences and accelerates the very process of development;

– Each couple and individual has the fundamental right to decide freely and with full responsibility, the number of its/his children and the spacing of births, and be sufficiently educated and informed on these questions, and benefit from adequate services related thereto.

After the World Population Conference, ILO had to examine its population activity programme and decide to implement a population and labour policy programme as an integral part of the World Employment Programme (1).

Right from July 1973, began the first regional project «Labour and Population in Africa» with financing from the United Nations Fund for Population Activities (UNFPA).

Its task was initially to draw the attention of governments to the rationale of programmes taking account of all factors having an effect on the working and living conditions of individuals and, more particularly, demographic factors.

In many countries, national seminars on population issues were organized in order to stress the multiple dimensions that demographic problems could assume and the consequences of the latter on the daily life of workers, that is, on the life of a major part of men and women.

The socio-cultural contexts of the then African countries and particularly the fact that some of them continued since their independence, to align their relative policy on demographic issues according to the spirit of laws enacted by their former colonial masters, led to some misunderstandings and reluctance. Since then, the countries are becoming increasingly aware that the areas covered by demography are on the one hand, highly complex and on the other, in no way limited solely to fertility as some people would think.

SPECIFIC OBJECTIVES AND PUBLICS

The information and population education and social and community welfare programme drawn up by ILO aims at the improvement of the living conditions of workers through a sensitization based on

(1) «Population, Development, Social Welfare» Brochure published by ILO on the occasion of the World Population Conference held in Mexico in 1984.

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a reflexion on the relations existing between their incomes and needs with a view to satisfying the basic needs of the family (2). But, above all, it is based on the inter-relationships between factors which have an effect on social and community welfare.

In fact the content of educational programmes (3) aims at sharpening awareness on the manner in which everything is connected, for example food to health, housing to income, employment, productivity, labour market, education to employment, health, size of the family; migration to socio-economic and family structures, unemployment, etc... A complicated network of subjects which, examined all together, determine and shape the daily life of individuals.

ILO's approach to this type of programme is based on the need to promote participation by offering above all, basic skills without which, individuals would not be able, by themselves or in a group, to assume a part of or the whole of their future.

Questions related to the size of the family and decisions regarding the spacing of births are not presented separately but as an integral part of a set of problems to be explained and subsequently, to be resolved. The groups or communities are led to a comprehensive reflexion after which they may, depending on their desires and needs, ask more specific questions and request possibly services which will only meet a fully conscious request.

The specific publics to which ILO addresses itself in this population education programme are the same as those who, by virtue of their fields of competence, are the object of special attention: workers of the organized sector (affiliated to a trade union organization, a co-operative, a socio-professional grouping) and their families, the young and future workers, members of voluntary associations like those created in the non-structured sector, trade, plantations and cottage industry, those grouping women as well as those operating at the village level.

Furthermore, employers – whether the State with regard to the Civil Service or large, medium or small scale enterprises – also form a considerable public that ILO's population programme strives to reach in order, on the one hand, that they *guarantee* the actions which will take place for the benefit of workers at the very place of work.

THE ORGANIZED SECTOR

The notion of *organized sector* used within the framework of the population and labour policy programme therefore makes reference to

(2) In the African programme, the term *family* generally covers also the extended family.

(3) See the brochure «Looking into our future», flanellograph of worker's education, ILO, Geneva, 1974.

the working members of a trade union organization, a cooperative or an institution of this type as well as families of these workers. This notion is not to be confused with that of the modern sector nor with the concept of the structured sector of the economy. It characterizes social groups one of whose common denominators is their participation in traditional structures which make it possible to develop other forms of solidarity (common work, neighbourhood, interest etc...).

Size of the organized sector

The size of this sector varies from one African country to another but represents in any case, between one third and over a half of the population.

This sector is bound to increase in the years ahead in terms of both urban growth and the application of policies aimed at halting rural exodus.

The groups constituting the organized sector may sometimes be divided and cover both a part of the urban population (paid workers, young men under training, a part of voluntary associations etc...) and a part of the rural population (members of cooperatives, voluntary associations, development committees etc...) and a part of the structured sector of the economy (wage earners and future wage earners of agricultural, industrial and service enterprises) as well as a non-negligible part of the urban and rural non-structured sector.

Influence of the organized sector

The influence of this sector, in society in general and in the development process in particular, deserves special emphasis. The groups of the organized sector perform a *model function* in their development, day-to-day life and modes of consumption. The new attitudes that they have had to adopt as cultural value-portraying groups are used and imitated by the rest of the population.

The phenomena of cultural value creation disseminated by these groups should be taken into consideration especially when it comes to the question of family dimension responsible not only for economic values but also and above all, cultural values.

The efforts made by ILO's population education programme in Africa in order to achieve an awareness and future changes in behaviour was made possible by the choice to act on the organized sector and with the direct participation of the population. This participation was strengthened by the integration of voluntary associations in certain projects, making it possible to avoid burdening Administrations during project implementation.

The nucleus of population education programmes in the organized sector includes, as we have seen above, the overall set of relationships

with daily life and work. If family planning is integrated in these programmes, it is first of all integrated as an existing concept in Africa and subsequently, in relation to the population policy followed by African States.

The programme was especially geared towards information with a view to motivating the population towards playing active roles in decision-making and change in behaviour, but this was not to isolate the subject from the wider context of the economy and social and community welfare.

In all cases, the aim of the education provided (4) was to encourage reflexion, critical analysis and decision making in all areas of population matters.

FUTURE WORKERS

This involves young men and women under vocational training as well as those in enterprises (apprenticeship) and even those outside enterprises (trainee students of vocational training centres etc...).

This group is of special interest in the sense that its members have reached an age where they are capable of thinking of their future and expressing their views on the manner in which they conceive the future and how they can influence it.

The 1961 International Labour Conference in adopting Recommendation No.117 concerning vocational training stressed: «Training is not an end in itself but a means of developing professional aptitudes of a person bearing in mind employment opportunities and making it possible for him to make use of his capabilities for the improvement of his interests and those of the community; it should tend towards the development of personality particularly when it concerns the youth».

Population education programmes strive to implement this recommendation by demonstrating to young people how individual decisions could lead to profound effects on life itself and the community as a whole.

They are generally integrated in the general vocational training programme either within the framework of ILO's technical cooperation projects or within that of national vocational training systems.

(4) See in this connection:
– Document on population educational activities in Africa prepared by the Population and Labour Policies Department, ILO, Geneva, 1983.
– Population education, *Population Profiles* No.11, FNUAP, New York, 1978.
– *Programme des politiques de la population et du travail*, Educational Activities, ILO, Geneva, 1979.

As in the case of other target groups a specific teaching material is prepared in order that it meet the very profile of young participants and the specific preoccupations and tastes at their age.

VOLUNTARY ASSOCIATIONS

They also form a particularly active group since it was noted that certain «members of development associations» or «local committees» were at the same time, very active in workers' committees of enterprises and also participated in other associations (parent-teacher associations, pre-cooperative groupings, consumer groupings, religious development commissions, etc).

These development associations are voluntary community groupings set up outside the state machinery whose main objective is the improvement of living conditions in their districts or villages which lack community services and infrastructures. These associations have a considerable audience and following from the whole population and can contribute more efficiently to the dissemination of population education messages.

Due to the fact that they are locally established, and not really recognized, it is necessary to identify them at the grassroots level.

The population and labour policy programme is particularly interested in associations which bring together members of the non-structured urban sector, women traders and craftsmen and village development associations.

PROGRAMME STRUCTURES

After the project has been identified, either by a need expressed by government, or within the organized sector, a project document is drawn up jointly by the government, the authorities (employers and workers) and the executing agency namely, the International Labour Office.

A project document determines the modalities of execution: Objectives, target population, the institutional cooperation framework, methodology, contents, plan of activities, financial and logistic contributions of partners and system of evaluation making it possible to measure the impact of the project before being presented to donors.

INSTITUTIONAL FRAMEWORK OF PROJECTS

As the organized sector is not represented by a single organ at the national level, the problem posed is the choice of a national cooperation body or agency.

The different projects have, to date, been attached to ministries such as those of Agriculture, Labour and Social Security, Health, Social affairs and the status of women, and this does not exclude the concern and interest of other government agencies or bodies. In certain cases, the attachment to the Ministry of Labour was purely formal, the project working directly with the trade union organization.

Administrative attachment translates the interest of governments in the improvement of living conditions of different groups. The authority of a ministry of Social Affairs has sometimes made difficult the determination of organized groups but made it possible on the other hand, to identify more easily informal sector groups or voluntary associations as in the case of projects in Cameroon, Congo and Mali.

Special attention towards a group does not mean that nothing should be undertaken with regard to other groups. In order to enlarge the scope and promote the interest of other administrative authorities in educational activities, interministerial and coordinating bodies could be set up. The aim of these bodies is to inform governments of the content and scope of projects, exchange experiences and information, know the infrastructures and possibilities favouring project implementation and seek their collaboration. An information seminar for the committees, bodies and authorities concerned with the project is scheduled to take place at the beginning of operations.

National cooperation structures are becoming communication channels insofar as messages can be transmitted to them at different moments. The use of different channels makes it possible to reach the population in different situations of daily life: during working moments through the enterprise and the trade union and in family life through voluntary associations and state or private Departments. The essential thing is to disseminate a multiplicity of messages with a view to motivating a responsible attitude in the field of population and social welfare.

The integration of voluntary associations in project activities can increase the effectiveness of messages. Sometimes, these organizations develop a drive and interest which are difficult to find in State structures, because they rely directly on the consensus of members and voluntary participation. The multiplicity of information channels enlarges the scope and strengthens credibility insofar as these channels are accepted by the target groups.

CONTENTS OF EDUCATION

There is no rigid methodology for defining educational contents but on the contrary, all efforts are made so that the latter meet precisely the situation and specific needs of each group depending on the

conditions and problems of the said population and the existing policy in each country. When it comes to determining the contents intended for groups such as trade unions, village committees or cooperatives, etc., a study of the area is undertaken in order to know their specific situation and the aspects concerning their population and social welfare problems.

Most projects begin with such a study and the facts established make it possible to orient the project in its entirety: preparation of contents; methodology to be used, educational equipment to produce, difficulties and means of surmounting them, etc...

A population education programme first tackles the problems with which a population should cope in its specific context. These are, for example:

– The employment situation, possibilities and sources of employment, working conditions and modes of production, the work of women and children, the number of unemployed people, work remuneration, and other problems related to employment;

– Cultural, ethnic and religious values with regard to the family, social welfare, marriage, the status of women, legislation, size of the family, and the consideration and evaluation of children as producers or consumers. The factors which could make difficult the implementation of population and social welfare projects;

– The dynamism of the population of the group or community studied: population growth, mortality and its causes, structure by age and sex, percentage of school-going population and migration;

– Resources of the group and community to meet needs: natural resources and wealth, incomes, social and community services;

– The needs of the community: magnitude of satisfied and unsatisfied needs namely: employment, education, health, nutrition, housing, environment, drinking water supply etc.;

– Obstacles in the way of satisfying needs and the solutions envisaged by the population with a view to resolving them.

To what extent can the increase in the number of family and community facilitate or make more difficult the satisfaction of needs?

Other complementary aspects related to the phenomena of population and social welfare also cover educational and information activity:

– An overall view of the population situation in the world and the problems generated by this situation;

– The problems specific to Africa and each country where projects are undertaken (increase and protection of the population, the situation of migration, rural exodus and urbanization, the lack of employment and foodstuffs in relation to demand etc...);

– The responsibility of parents towards children and family members in general and the ways and means of achieving better living conditions.

All these topics treated by population education should nevertheless take account of the fact that the family can only improve its living conditions by increasing its resources faster than its needs, as the latter is influenced by the size of the family, parents should have the possibility of taking decisions concerning the family.

Similarly, the magnitude of health care given to the mother before, during and after pregnancy is the object of special attention just like the health of the child himself.

In the current prevailing conditions in most African countries, the roles assigned to women, the division of labour, methods of production and processing have harmful effects on the population particularly its feminine part and children.

Therefore, population education provided by ILO deals with two primordial factors:

– The improvement of working methods which will make it possible for individuals to better devote themselves to an improvement of their health and living conditions while drawing better incomes;

– The sharing between men and women of all knowledge leading to an improvement, so as not to split a society into two wrong groups on the one hand, and to encourage men to assume better assigned responsibilities on the other.

The latter choice, which deals with the priority to be given to educational actions for men, also derives from the experience acquired by the programme which made it possible to note that women – even those fully informed and enlightened – can, for most of the time, implement their knowledge and skills only with the consent of men. Failure to acknowledge this preponderant sociological factor would be tantamount to closing our eyes on realities, but above all, would make us accomplices of the aggravation of the very situation of women. To this end, actions are also undertaken in order to improve mothers' incomes; these incomes are not, in fact only a supplement but often the principal contribution to the family budget.

Certain subjects concerning the organization of groups and communities and social welfare are also developed in educational action:

– Sanitary education,
– Improvement of housing and the environment,
– The principles of domestic sciences and the search for new sources of income,
– The supply of drinking water,
– Organization and motivation of communities and groups for purposes of assuming responsibility for their development,
– The preparation and execution of small-scale projects of social welfare and production.

Finally, at the methodological level, educational contents are carefully adapted to the situations and desires of different groups. To each

group and age group corresponds a different message: workers of urban industrial enterprises organized into trade unions; workers of the informal sector – craftsmen, retail traders – members of agricultural cooperatives, development associations of villages and districts, young men and women under vocational training, women's unions; etc.

EDUCATIONISTS AND GROUP LEADERS

The programmes and projects are implemented within the framework of ministries, services or organizations which should assign a local staff to them. Information and training action is addressed first, to trainers, group leaders and voluntary leaders and subsequently, to the population in general.

The projects start logically with the formation of a national group of trainers who, in turn, will train education officials in their groups or meetings organized for leaders.

Pedagogical contents are defined and a plan of training drawn up. It is during the study of the milieu that different local leaders and activity promoters are identified and invited to participate in educational activities.

The leaders and activity promoters of groups and communities constitute one of the key elements of projects. This category of persons has a crucial influence on the acceptance of programmes by their community and influential groups. Their personal contacts with family heads and group members facilitate the circulation of messages and awaken favourable attitudes towards projects.

The training of group leaders and activity promoters is fairly crucial for also motivating the organization of retraining seminars. The training includes all subjects covered by population and social welfare education, an introduction to the techniques of communication and the production, adaptation and use of a teaching material. The leaders and activity promoters are permanently encouraged by project officials who organize for their benefit information and motivation meetings, show keen and regular interest in their work and associate them with all activities and decisions concerning the implementation of the project in their groups and communities.

The village leaders and activity promoters organize meetings, educational sessions and seminars in their respective areas in order to provide information to the population. The action is strengthened by follow-up and inspection visits by project officials and trainers. Discussions with members of different groups make it possible to test their level of understanding and motivation, the training needs of group leaders and educational equipment requirements.

Subjects which should be treated in a special manner or which, by virtue of their complexity require special qualifications such as some socio-economic subjects, may be developed in the presence of the authorities. Topics already explained may be developed in depth through additional explanations with the help of audio-visual media such as *flanellographs*, films, slides, etc.

The use of mass communication facilities such as the press, radio and television, broadcast of programmes through the use of loudspeakers, constitutes yet another means of information and education intended for a larger audience than the organized groups. The use of local languages in all educational activities was a permanent concern of project authorities.

EDUCATIONAL EQUIPMENT

The level of education of persons affected by projects is very different. They represent a complete range from the literate, semi-literate up to the illiterate. Indeed the latter category forms the major part of target groups that the ILO population programme wishes to reach.

Therefore, it was necessary, right from the beginning to choose a certain number of options in order to meet these different needs.

It was envisaged to design the need of pedagogical media according to the different publics and their educational level if vast means and facilities were available. It was also necessary to consider that an educational equipment suitable in Senegal could not be used in Ethiopia, that a medium of instruction devised in Kenya would not be suitable in Mali, that the multiplicity of languages spoken on the African continent could not be reduced in adopting French or English which carry foreign concepts, etc.

In order to meet this diversity of needs and levels of intervention, ILO undertook, as early as before 1974, to choose an approach which would resolve in part, this whole problem.

It was first of all, a question of designing a population educational equipment which was purely visual without words and figures, thus making it possible for the user to choose the level of his participation and his language.

All the media drawn up in the form of models are original creations meeting the criteria of culturally adapted forms and easily adaptable with few changes, made with very simple means, light materials facilitating transport and flexibility of use not requiring any recourse to the use of electricity.

All these topics presented by apparently single drawings are in fact, the result of a very profound research based on studies ranging from gestures or demonstrations to clothings, to the symbolic signifi-

cance of colours to scenes of ordinary life, to the most often expressed thoughts, to the aspirations of the majority, to taboos, to the socio-economic roles of men and women, etc. All these pedagogical roles are designed to bring about an active participation in the discussion of their own problems by individuals themselves, and subsequently make possible the joint search for possible solutions. The term «sensitization equipment» is that which would perhaps define best the pedagogical tools prepared.

Visual equipment is in fact a debate-generating topic. In it, are involved sometimes, details which, negatively or positively, move participants to react to and talk of subjects which, they sometimes have never treated and of which, until then, they were not aware.

The majority of educational equipment designed by ILO for its population projects in Africa were aimed at attaining a simplicity which makes it possible to treat the most complex subjects with very different publics.

Today, the media are designed within the framework of each national project. Trainers and group leaders who will work on the project are organized at the beginning of operations at the national level. The same spirit prevails for this specific development as that which prevailed regarding the development of models described above.

These educational equipment design workshops begin (and this is an indispensable approach) with the analysis of target groups. Through this fundamental exercise, will also be defined the nature of media, their content, the presentation of subjects, the technical means for producing them, etc.

Picture boxes, flanellographs, puppets, posters, mural newspapers, do not necessarily exclude the production of more sophisticated means such as those requiring projection but the most attentive care is given to the conditions of use in order that the means correspond to different contexts.

Exchanges between projects and services have widened the sphere of influence of equipment produced and have also enriched experiences. Different units of production of educational equipment are being organized in order to meet material demand.

Besides, constant research is carried out by agencies which also produce educational equipment on similar topics in order to learn from them and also to avoid committing errors of design such as those sometimes noted and which are very prejudicial to the transmission of messages or to individuals.

Contacts with other equipment producers may also lead to joint productions which are very desirable in all aspects. They infact make possible not only a unity in the messages, but also a multiplication in greater quantity and this makes it possible to reach more interested groups.

ILO's Department of population policies and Labour in Geneva and regional advisers organize and assist in the activities of these groups and design workshops of educational equipment.

The setting up of inter-agency teams of Regional Advisers should make possible an enrichment of the contents of educational media and a greater distribution, thus securing a greater impact of programmes on the target groups.

FROM EDUCATION TO PRACTICAL EFFECTS

With education and motivation to action, the communities and groups duly sensitized and suitable to participate in various projects have developed a capacity of reflexion which has led them to the implementation of small scale projects aimed at the satisfaction of priority needs. This is how, in certain projects, the groups and communities have decided to embark on certain activities themselves – these activities being considered as indispensable to the improvement of their living conditions including the following major ones:

– Construction and running of community dispensaries, health posts and village and district pharmacies (Gabon, Cameroon, Congo and Togo);

– Planning and development of water holes and water supply services in districts and villages;

– Community programmes for the improvement of housing and environment, construction or rebuilding of houses, construction of latrines and refuse pits and reafforestation programmes (Cameroon, Congo, Mali and Togo);

– Community production programmes intended for the market and consumption in order to improve the food system and incomes (Cameroon, Gabon, Togo);

– Essential commodity supply programmes (Congo and Gabon);

– Social gathering centres for literacy and activity (Cameroon, Congo, Gabon, Mali and Togo).

The programmes for the improvement of living conditions have made it possible to reduce infant mortality rates and contributed to a more harmonious development of the family and community. Thus, parents who are more privileged with regard to the survival of their children are better prepared to take decisions concerning family size.

Different studies carried out demonstrate the existence of a corelation between the improvement of living conditions of groups and communities and the appreciable fall in fertility rate. The programmes exclusively aimed at the spacing of births are not sufficient to bring about a change in attitude and behaviour especially in Africa.

OTHER PROJECT ACHIEVEMENTS

In addition to the results obtained in the field of education and sensitization of members of the organized sector and voluntary associations and the influence of project activities on behaviour, other advantages were acquired. These include:

– Promotion of the status of women and integration in socio-economic programmes: the projects revealed the preponderant role of women as mothers and producers, in the definition of family welfare and in the satisfaction of basic needs.

Other actions such as the organization of production and savings groups (tontines) course in domestic sciences and the construction of improved residential quarters, cornmills and millet mills, water supply near homes etc... were undertaken specifically for women:

– Organization of groups and communities: Education and sensitization action made it possible to establish or strengthen the bonds of solidarity within the groups and communities. During evaluations, fruitful exchanges were noted within groups and communities which are beneficiaries of projects as compared with the initial situation and especially in relation to non-beneficiary groups.

– Increase in the demand for services and creation of new services: dynamism and the spirit of participation established within beneficiary groups have facilitated the setting up of other programmes and public or private services for the improvement of living standards (health, production and infrastructural programmes, etc...).

– Keen sense of awareness of population problems by Governments: Governments of beneficiary countries have followed projects with interest, by giving a political, financial and logistic support.

For example, they have absorbed the operating cost of certain projects which had no more external available funds or those projects for which the funds were insufficient.

Educational projects were also the source of other projects or programmes required for the definition of an explicit population policy. This was the case for projects creating a population and human resources unit at the level of planning ministries.

In certain projects, one of the objectives was to help governments to define a coherent population policy (Cameroon, Congo, Mali, Zaire).

PROJECTS THAT HAVE BEEN IMPLEMENTED IN AFRICA SOUTH OF THE SAHARA

Cameroon: «Population action and improvement of social welfare of members of social promotion associations and cooperatives».
Duration: The project started in November 1978 and is still on-going.

A new phase was envisaged for a period of 2 years starting from January 1985.
Achievements and results obtained:
– Training of group leaders and local leaders (540 persons);
– Education and sensitization of the population in the field of organization, social welfare, responsibility of parents and health;
– Specific projects implemented: construction of two centres in experimental homes, development of water holes, development of districts, organization of health posts and community pharmacies.

The leaders working in the selected homes were very dynamic and motivated. A certain change of attitude with regard to family size was observed especially in suburban areas motivated by reasons of cost of living and children's education.

Congo: «Promotion of women and family in the Pool region and the Koukouya Plateau». This project has three phases from 1976 to 1982. The results obtained are:
– Personnel training of the Ministry of Social Affairs working in the entire country: 500 trainers, supervisors, and group leaders were trained.
– Education of the population in the areas chosen.
– The promotion of specific activities of social welfare improvement of housing and environment, the creation of production groups and health posts.
– The production of educational equipment.

Gabon: «Cooperative development and improvement of social welfare and living conditions of cooperators and users in order to halt rural exodus».
Duration: the project started in August 1980 with funding from UNFPA but from 1982 onwards, the government assumed full responsibility for it. The project is continuing and a new phase of 4 years has been endorsed.
Results obtained:
– The education and training of 300 group leaders, trainers and leaders;
– Permanent education of the population in the field of social welfare and cooperatives;
– The production and adaptation of educational equipment;
– The realization of small-scale projects for the improvement of living conditions and production (the creation of 50 *pre-cooperative* groups, housing improvement projects, construction of dispensaries, water supply and development of water holes, construction of «huts», creation of community activities, organization of workshops and storage and productions areas, etc...).

Mali: 1 – «Cooperative Education and Social welfare of cooperators and users». This project aims at:
– Educating the target groups in the areas covered by the project,
– The production of educational equipment;
2 – «Population Education through the participation of craftsmen of the non-structural sector in the improvement of their social and community living conditions».

This project has just started and aims at the education of craftsmen and their families in the field of social and community welfare and a motivation to assume responsibility for specific actions of improvement of their living standard.

Togo: «Social Welfare».
Duration: July 1977 to July 1979.
The major results obtained were:
– The training of medical, para-medical and social personnel. 1,160 persons were trained: social assistants, assistant mid-wives, technical agents, nurses, health educators, technicians in the audiovisual field;
– Education, and permanent sensitization of the population in 5 regions (educational meetings, radio programmes, brochures and posters etc...);
– The construction of infrastructures (latrines, wells; literacy centres, social centres).

Zaire: «Social Welfare education in the organized sectors»
Duration: March 1979 – March 1981
Results obtained:
– Training of 250 group leaders and supervisors of UNTZA, cooperatives, youth associations, churches, etc...;
– Production and adaptation of educational equipment;
– Assistance to the Ministry of Labour.

Other projects could emerge in Burkina Faso, Ghana, Mozambique, Niger, Nigeria and in many other countries where our regional advisers are helping in the formulation of requests by governments.

FUNDING AND ACTION PROSPECTS

External funding of project was, in most cases hitherto secured by UNFPA. In certain projects, a substantial bilateral contribution for specific activities was obtained particularly from the Canadian Government.

As far as action prospects are concerned, it can be said that significant activities undertaken hitherto within the groups and communities chosen reached only a low percentage of the population. A much wider scope of action still remains to be undertaken.

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Moreover, the international Population Conference which took place in Mexico in August 1984 gave the guiding principle for population action for all. For its part, ILO is continuing its programme and its Governing council, at its 28th October 1984 session, endorsed the following conclusions:

– The World Population Action Plan (WPAP) adopted by the Bucharest Conference has now received the membership of all participants who agreed that population is, or should be an integral part of the socio-economic development process and should not be dissociated from it.

– The majority of countries are of the view that an accelerated population growth leads to serious problems for development, particularly employment.

– Family planning programmes should receive the required priority both for reasons of general development considerations and family welfare, and mother and child care.

– The World Bank made population the topic of its annual report on world development in 1984. The principle being that in many third world countries, an accelerated population growth constitutes a serious obstacle to development; international aid in this field should be increased from 500 million to 2 billion in the year 2000.

– The objective of full employment in the year 2000 seems to be more remote than ever, because the growth of labour will be two times higher during the period 1980 – 2000 than during the two preceding decades.

– The recommendations concerning the continuation of the implementation of WPAP and the Mexico declaration are of direct interest to ILO. The recommendation states inter alia, that it is necessary to lay special emphasis on the relationships between population trends, supply and demand of labour, the problems of unemployment and the creation of productive work.

– Several recommendations stress the importance of an improvement in the status of women as a goal in itself and as a means of attaining population objectives. Two recommendations deal with the right of women to work which should not conflict with their role as mothers, apart from the objective of population policy and cultural tradition (see paragraph 11 of the Mexico Declaration).

The Mexico declaration also encourages the participants of populations in social welfare and population programmes. The experience acquired in the course of the last decade demonstrates that it is indispensable that the entire community and local organizations participate fully in programmes and thus have the guarantee that these programmes meet local needs and tally with personal and social values.

A special place is given to mother and child care and family health in paragraph 12 of the same declaration, while the paragraph 15 stresses the importance of health improvement.

The Conference also recommends the continuation of efforts in the task of information and education of the population (para. 13).

In conclusion, educational and social welfare programmes conform to the recommendations of the conference and will continue to draw on the World Population Action Plan with a view to «improving standards of living and quality of life for all peoples of this planet in promotion of their common destiny in peace and security» (para.22).

Through its actions among workers, that is among the majority of individuals who live in the world, ILO has before it the task of facing a colossal challenge: the satisfaction of their needs, which, in both quantitative and qualitative terms will probably be the task that the end of this decade should necessarily strive to accomplish.

W.I. MLAY*

TRAINING NEEDS TO SUPPORT POPULATION EDUCATION/ COMMUNICATION ACTIVITIES IN SUB-SAHARAN AFRICAN COUNTRIES:

A Multisectorial Training Strategy reflecting the UN FAO Viewpoint

THE SOCIO-ECONOMIC CONTEXT

Sub-Saharan Africa has in recent years attracted the attention and concern of the international community because of the deepening economic crisis which has persisted since the mid-1970s.

Most of the studies of the prevailing situation confirm that the crisis is mainly structural in nature and that a wide range of long-term policies are needed in addition to the short-term measures, currently in operation, to ease the present constraints on development.

There is also a growing consensus that a contributory factor to the obstacles of sustained development in the sub-continent is the high rate of population growth which has been accelerating over the last two decades. According to a recent World Bank Report (1984:26):

> «The growth of population is the single greatest long-term threat to Africa's economic development. Others include the widespread existence of disease; inadequately trained manpower; the slow development of new technologies especially in agriculture; and the erosion and deforestation of the land. Many of these basic issues have been neglected or, as in the case of education, programmes to address them have often been poorly designed».

While recognizing that the reduction of population growth *per se* will not necessarily speed up economic development, in the long run, development progress and improvement of the quality of life for the majority of the population who live in rural areas, will greatly depend on the extent to which countries of the region appreciate the interrelationships between population and socio-economic development and adopt strategies which will influence population trends.

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Population and development are interactive. Therefore population considerations must act upon development planning since demographic variables play a key role in determining the nature and progress of the development process. For example, nearly all aspects of rural development are related to population size, composition and spatial distribution. Thus at both regional and national levels, policy makers and planners will have to take account of population characteristics in dealing with such matters as:

– Demand for Education (size and growth of school age population),
– Health services, Food, Nutritional Needs (Total Population, its composition by age and sex and its annual growth rate),
– Demand and supply of labour (Working population and participating rates),
– Maternal and Child health care (Women in reproductive ages, the age-sex structure, expected number of births per year and children under 5 years).

Population Trends and Consequences

The population of sub-Saharan Africa is growing faster than that of any other continent. Its growth rate has accelerated over the last two decades from about 2.3% per annum in 1960 to about 3.1% in 1983, mainly as a result of a continuing decline in death rates and persistently high birth rates. Death rates have fallen from an average of 25 per 1,000 in 1960 to an average of 17 per 1,000 in 1983 in most countries of the region. Further declines may be expected as health services expand. Birth rates on the other hand are high throughout the region and have changed little or not at all from the average of 50 per 1,000 in the 1960s. Since the conditions for high birth rates still operate, prospects for a decline in fertility levels in the near future are low. This means that the size of the population will continue to increase rapidly and, as projected, total population which rose from 270 million in 1970 to 359 million in 1980 is likely to more than triple by the year 2020.

The implications of these population trends have been documented in many studies:

– The population aged under 15 constitutes more than 45% of Africa's population. Hence there is a growing dependency burden with increasing pressure on basic services such as health, education, food and shelter.
– Africa's labour force is growing at about 3% a year. Given the slow rate of employment generation and limited job openings outside the agricultural sector, the increase of population pressure on the land and unemployment in the urban sector will continue to grow.
– It is estimated that urbanization in sub-Saharan Africa is growing at

an average rate of 5% to 7% a year (largely as a result of rural to urban migration). The urban population which makes up 20% to 25% of the total population is growing more rapidly than that of most other developing countries. Consequently, African countries are unable to cope with the growing demand for urban employment, housing and basic services. Existing infrastructures are rapidly deteriorating due to overuse and lack of resources to maintain them.

Even without the effects of the drought which has severely crippled the economies of many sub-Saharan countries, these population problems would be a severe handicap to the developmental aspirations of the sub-continent because of the overall downward trend in the socio-economic conditions. The World Bank Report (1984:1) sums up Africa's grim economic and social conditions over the last decade in the following terms:

> «Africa's economic and social conditions began to deteriorate in the 1970s, and continue to do so. The Gross Domestic Product (GDP) grew at an average of 3.6% a year between 1970 and 1980, but has fallen every year since then. With population rising at over 3% a year, income per capita in 1983 is estimated to be about 4% below its 1970 level. Agricultural output per capita has continued to decline, so food imports have increased: they now provide about a fifth of the region's cereal requirements. Much industrial capacity stands idle, the victim of falling domestic incomes, poor investment choices, etc... Many institutions are deteriorating both in physical capacity and in their technical and financial ability to perform efficiently. In short, the economic and social transformation of Africa, begun so eagerly and effectively in the early years of independence, could be halted or even reversed».

Governments attitude towards Population Issues

Both the Second African Population Conference (Arusha, 9–13 January 1984) and the International Conference on Population (Mexico City 6–13 August, 1984) underscored the dramatic and positive change in attitude towards population issues by African Governments as compared to a decade ago at the World Population Conference, Bucharest, 1974. During the Bucharest Conference a World Population Plan of Action was adopted. The Plan emphasized that population variables are strongly linked to social and economic development variables, both as causes and consequences. Governments were therefore urged to incorporate population variables in their rural development policies and programmes. In the case of sub-Sahara Africa, despite some efforts made in this direction, urban areas continued to receive a lion's share of budget allocations at the expense of the agricultural sector and rural areas where over 75% of the population live. Commitment to include population issues in rural development planning was not particularly strong. Consequently there was little progress made in meeting both population and rural development objectives in the sub-continent over the last decade.

The 1984 «Kilimanjaro Programme of Action on Population» emerged as a major document from the Arusha Population Conference and the Africa Statement at the Mexico Conference re-affirmed African governments' intention to use population as a central component in formulating and implementing policies and programmes for accelerated socio-economic development. African states adopted the principle that «improvement in the quality of life in the region requires effective programmes to reduce current high levels of fertility and mortality and alleviate the uneven distribution of population». In short, the Programme of Action which was adopted by African governments expressed great concern about the current high population growth rates which constitutes a major challenge to the region's ability to maintain, let alone raise the standard of living of the majority of the people.

However, although the Kilimanjaro Programme of Action on Population and Development was adopted by all participating countries, few have begun to implement the recommendations. Few countries have committed themselves to reducing population growth, set up a coordinating body to draw up a population policy and programmes and a strategy for implementation. Given the current preoccupation with short-term handling of crises in Africa, it is possible that the momentum gained in 1984 for dealing with population/development problems may be lost unless steps are taken to motivate the implementation of the Action Programme.

This paper proposes the use of a multi-sectoral training strategy to integrate population education into rural development training programmes as a step towards realizing desired national goals for economic growth and social development as set forth in the Kilimanjaro Programme of Action.

THE SUBJECT MATTER OF POPULATION EDUCATION

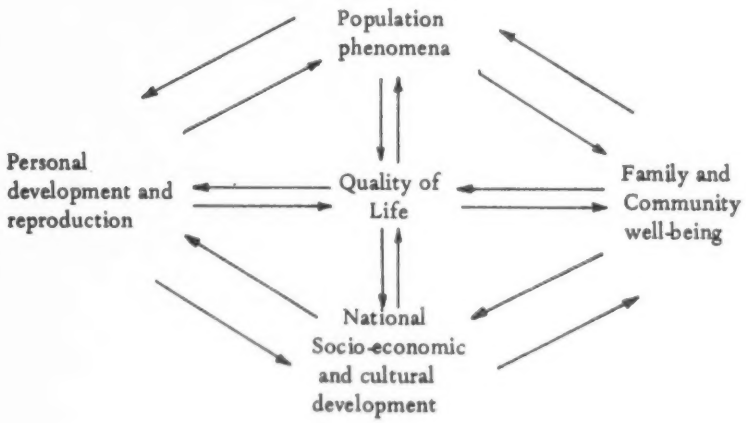
Population education seeks to inculcate an understanding of the interrelationships between demographic factors and social, economic and cultural processes in society. It is based on the fact that all economic and social phenomena are influenced, at least in part, by demographic factors and vice versa. A better understanding of population and its relation to development will therefore assist learners to define the problems of development more accurately and enable them to formulate effective solutions to such problems.

The subject matter of population education has undergone significant change, embracing a wider scope with time. In order to create a widespread knowledge and understanding of population problems and to motivate changes in attitude and behaviour conducive to the improvement of quality of life, content areas previously considered as distinct, have been subsumed under population education:

«People need to understand the significance of the size of family and spacing of children for the well-being of the individual family and community; they need to see how the size of their family is related to their nation's growth and the availability of resources to support its population; they should understand the need for accommodation between their individual desires for freedom of choice and the nation's need to guarantee its sovereignty and viability. Finally, to effectively regulate their fertility, they must understand human sexual reproduction and contraception»(Kline & Harman, 1976:126).

This wider scope of population education can be subdivided into three inter-related content areas: Population factors; Interrelationships between Population Factors; and Socio-economic development at macro and micro-level (annex:1).

In practice the main issues covered in the three content areas are related to one another and need to be seen as operating in a cyclic process with quality of life as the central goal:



DESIGN OF POPULATION EDUCATION PROGRAMMES

The wider scope of population education provides an overall description of its content. This has to be translated into a national context in order to take account of actual needs and local situations. Although each population education programme has its individual aims and objectives, at the national level it is necessary to identify general principles or criteria which will guide the design and selection of content. The following are some of the main aspects to consider.

A Country's Development Goals and Needs

The starting point for designing a population education programme is dependent upon national development policy and plans. Each nation sets its goals for development in terms of its ideological and cultural orientation and adopts policies to reflect the perceived needs and aspirations of its society. Factors such as the impact of rapid population growth on food supply, rapid urbanization, high infant mortality, population pressure and availability of land – will all greatly influence the emphasis placed on a population education curriculum. In the few cases where an explicit national population policy exists this will form the main guide. In most other cases implicit population policies may be gleaned from national development plans and other government policy statements.

Institutional Framework

Population education has to be introduced within existing educational and other training institutions. The roles and functions assigned to different levels and sectors of the education and training system both formal and non-formal will therefore influence the types of content to be included in each. This means that attention has to be given to the broad training objectives of each institution and the specific goals of each programme into which population education is introduced.

Social and Cultural Factors

An understanding of the socio-cultural factors which influence society in a given country is important both in the choice of content and the appropriate approaches to different themes in population education. Traditions, customs and religious affiliations influence social values and attitudes to such matters as nuptiality, fertility and contraception. These values will therefore determine the treatment of different topics and the selection of teaching materials.

The Availability of Teaching Materials

The nature and scope of a programme content in population education will also be influenced by the availability of adequate training materials and information concerning characteristics of the national population. Improvements in this area can be made by structuring the training programme in such a way that population information and appropriate teaching aids will be generated in the course of time through field studies and research.

INTER-AGENCY MULTI-SECTORAL APPROACH TO POPULATION EDUCATION FOR RURAL DEVELOPMENT

The Need for a Multi-sectoral Approach

Even when a broad framework for a population education programme is established within a national setting, its introduction into existing curricular of academic and other training institutions will have to be carefully planned. Since population education as an integrating, development-oriented subject is a new innovation, it needs to be integrated into those subjects and training programmes which target groups such as rural development personnel will cover as part of their specialized training.

Such an integration provides an ideal environment for inter-agency collaboration in training rural development personnel using a multi-sectoral approach. There is a general consensus that rural development personnel can best act as effective change agents if their training has an interdisciplinary and multi-sectoral approach which has not been the case in most rural development training programmes in sub-Sahara Africa. Much of the confusion, duplication of effort and lack of tangible results in rural development in the region has been, at least in part, the result of too many agents each functioning within their respective vertical programmes. The latter, moreover, do not always take into account the needs and aspirations of rural people.

The subject of population education therefore lends itself to this multi-sectoral approach which links population and rural development. Thus, for example, using the «quality of life» concept as the central goal, aspects of agriculture, health, environmental management and family planning can all be coordinated in an interministerial training programme which makes the maximum utilization of local resources. In this way joint training programmes can foster team work spirit during planning and implementation of effective rural development programmes. Where there is an explicit national rural development policy such an approach will have an existent institutional and administrative framework within which to operate and therefore have a greater chance of success.

Institutional Setting for a Multi-Sectoral Population Education Programme

Since the structure of the training institutions is already set, decisions have to be made with respect to the type and level of institution into which a programme of population education can be integrated. The choice of institutions and level is a policy matter. Once the decision is taken however and the goals set, the process of devising the programme, assembling materials and constructing curricular should follow without undue difficulty.

The type and level of institutions and the programmes into which population education may be introduced can be outlined as follows:

Institution	Level	Programme
a) Academic	Pre-University	General knowledge, Maths and Biological sciences.
	University	Faculties of Social Science, Medicine and Agriculture.
b) Technical	Pre & Post Secondary	Administration, Management and Planning; Agriculture, Para-medical, Home Economics, Social Welfare and Vocational trades.
c) Adult Education	All levels	Most programmes

Population education can therefore be incorporated into short-term programmes to reflect the broader objectives of each programme as well as to sensitize those in a position to formulate policies, prepare plans and programmes or implement development activities in rural areas, to the various ways in which population/rural development factors interact and influence each other.

Nevertheless practical problems can occur when attempting to incorporate population education in a multi-secoral setting. There is frequently the difficulty of accommodating a new course in most pre-service curricular which tend to be overcrowded. Depending on the type of institution and the courses offered, population education content can be introduced by one or more or a combination of the following methods:

– A separate course;
– A unit of a new course;
– A unit of an existing or revised courses;
– Integration into existing courses.

Despite the multi-sectoral nature of population education there are, advantages and disadvantages to be considered in each of the above-mentioned methods of incorporation. Monitoring and evaluation are therefore necessary to ensure that the aims and objectives of each programme are achieved.

Population Education for Rural Development Programmes

Population education is intended to create awareness and to provide learners with the critical capacity and analytical skills necessary to examine and select alternative solutions to population-related problems. Moreover, population education is intended to filter through all strata of society, to the Community, family and individuals whose decisions ultimately influence the national situation. This means that all learners at institute level should be considered as trainers and communicators who should be capable of passing on their knowledge, skills and information to others in the course of fullfilling their duties.

This is particularly true of sub-Sahara Africa where the majority of people live in rural areas and have limited access to formal education. In such a situation, extension workers and inter-ministerial teams working at district and sub-district levels form the ideal cadres for population education, both during pre-service and in-service training. Population education and communication programmes should therefore be designed, at each level, to reflect a coordinated, multi-sectoral and inter-ministerial approach which will permeate to village level.

Training objectives should be clearly defined to reflect the needs of the target group concerned. For example training for political and other opinion leaders should focus on creating an awareness and instilling a sense of commitment to population education and communication. For the technical staff training should emphasize an understanding of population concepts, and the creation of the technical capacity to link population and socio-economic development. Planners should be armed with basic analytical skills in demography which will be an integral part of their decisions with respect to agriculture/rural development planning. On the other hand, extension staff in daily contact with rural people should be trained to communicate population information and education which will lead to a change in behaviour at the family and personal level with respect to family planning, family management, responsible parenthood and thus stimulate overall rural development.

POPULATION EDUCATION PROGRAMMES IN KENYA – A CASE STUDY

What has been said so far about training needs and approaches to support population education and communication activities in sub-Saharan Africa is of necessity only generally applicable to individual countries. It is necessary therefore, to translate the basic principles described above to country-specific situations. In Kenya, for example, there is a rapidly increasing awareness of the need to give due emphasis to population education in all training programmes.

National Development Policy

In 1983 Kenya adopted a national rural development policy known as «District Focus for Rural Development». This is a decentralization policy aimed at broadening the base of development responsibility by moving most decisions closer to the point of implementation (i.e. administrative districts) and to the people who will be affected by these decisions. With this approach districts will assume greater responsibility in identifying development problems and prospects and for allocating domestic resources to specific programmes and projects for equitable development. Such a responsibility demands a well trained district multi-sectoral team which can establish strong horizontal linkages among all the sectoral ministries and other agencies operating at the district level and thus bring about comprehensive development in rural areas.

Kenya has also recently prepared national population policy guidelines which have been broadly adopted for the 1984-88 Development Plan. The objectives of these guidelines include:

– To reduce population growth rate from 4.1% to 3.5% per annum by 1988 through educating actual and potential parents regarding the benefits of smaller families.

– To reduce mortality further particularly infant and child mortality, because such reductions would ultimately lead to lowering of fertility.

– To make family planning services widely available and to increase the number of acceptors in rural areas by increasing the number of health facilities and trained personnel offering these services.

Kenya has therefore a well-articulated rural development framework which together with population policy guidelines spell out national priorities for training multi-sectoral population education teams.

Institutional Framework

Kenya has identified two approaches for the training of its District-level personnel. One, an intensive training programme to be carried out by the Kenya Institute of Administration (KIA) for all the officers who will be involved with the implementation of the new policy. Secondly, a review of existing national training programmes in institutions catering for rural development will ensure that they incorporate relevant content for the new approach to rural development.

A curriculum for the District Focus has been prepared by the staff of KIA to cover a six week training programme. Six subject areas have been defined, one of which is «Population and Socio-cultural Aspects of Rural Development». Topics to be covered include:

– The National Population Policy,

– Assessment of population characteristics of the district,

– Demographic trends and population projections,
– Population variables in relation to other socio-economic variables in various sectors (agriculture, health, education, etc.),
– Implementation of the National Population Policy: Population education information and communication – to encourage smaller family size and programmes to improve family planning service delivery systems.

In addition to this programme intensive District Seminars will be conducted for the district level technical staff and other supporting officers from relevant sectoral ministries and the representatives of non-governmental organizations working at the district level. Seminars specifically on population education are currently being planned within this arrangement.

Within the University of Nairobi the Population Studies and Research Institute trains both undergraduate and postgraduate students. In addition, the institute collaborates with governmental institutions such as the Central Bureau of Statistics and international organizations in carrying out population research. The Institute therefore is one of the key resource centres for trainers in population education programmes for the District Focus.

Another potential University-level training institution is the Faculty of Agriculture of the University of Nairobi. At present the Faculty has no population/demography course in its curriculum. However, the recently proposed «population and labour force» training guide for agricultural education institutions in Africa developed by FAO, with assistance from UNFPA may be the basis for establishing a population course within the faculty's training programme.

Kenya is also fortunate in having a national population coordinating body – the National Council for Population and Development (NCPD) which was established in 1982 and based in the Office of the Vice-President and Ministry of Home Affairs. When the Council is fully in operation, its information, education and communication department will assist in developing and coordinating an integrated national population education structure. During the 1984-88 Development Plan period, the Council will, in cooperation with non-government organizations, intensify its programme of informing and educating rural people in particular, regarding the benefits of smaller family sizes. The Council will also set policy goals to guide the Integrated Rural Health and Family Planning programme which the government launched in 1982.

In order to carry out its mandate, the Council has recently requested FAO to organize orientation seminars in population education for District Opinion Leaders, as a follow-up to the national Leaders' Seminar held in Nairobi in 1984. The Council has also contributed to the preparation of the training guide for District Focus and, together

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with the Ministry of Finance and Planning has requested FAO to assist in preparing a joint project proposal for in-depth training seminars in population education for multi-sectoral district personnel responsible for stimulating rural development.

It can be said from the foregoing that in Kenya, within the District Focus Policy and the national population policy guidelines, a multi-sectoral training in population education provides a powerful strategy for bringing about a wide-spread knowledge and understanding of population problems in a developmental context and to motivate changes in attitudes and behaviour conducive to the improvement of the quality of life in rural areas. Nevertheless the institutions responsible for coordination and implementation, such as the NCPD, will need to be strengthened and be more effectively utilized in order for them to make tangible and lasting impact on rural development in the country.

CONSTRAINTS IN IMPLEMENTING A MULTI-SECTORAL TRAINING STRATEGY

Even where there are many favourable conditions for implementing a multi-sectoral population education as in Kenya, there are many actual and potential problems which can hinder progress. Firstly, there is the very real problem of coordination. A coordinating institution must be identified, preferably one which will have strong links with all sectoral ministries, training institutions and other agencies involved in population/development activities. In the case of Kenya, the National Council for Population and Development is the agency vested with this responsibility. However, the Council is still in its infancy and needs to be strengthened both structurally and in its manpower before it can be able to fully discharge its responsibilities.

Secondly, and equally important, is the need to have a strong commitment by the political leadership and senior civil servants at all levels in all participating institutions. Often, major decisions will be delayed or not taken because of a lack of official support and as a result, programmes and projects can be held up indefinitely. Leader's seminars can be used as in the case of Kenya to enlist the understanding and support of leaders at various levels, but these seminars will only be effective if they are well thought out to ensure that policy makers as well as the technical staff see population issues as an important and integral part of development process both at national and at district (local) level.

Population issues in sub-Sahara Africa have for many years been a very controversial subject and public opinion has on the whole been tentative with respect to family planning and reduction of family size. Consequently most politicians still feel uncertain about propagating population information and the need for family planning. The remedy

for this hesitancy is an effective Information, Education and Communication (IEC) programme to educate them in the context of well articulated national development and population policies. The full appreciation and understanding of the inter-relationship between population and development by opinion leaders and implementors of government policy will lead to rural people being able to adopt values and take decisions with regard to smaller family size and consequent higher standards of living.

In Kenya for example, there has been since 1983 strong commitment by government and the KANU party leadership to slow down the rate of population growth (estimated at 4.1% per year). Despite this commitment at the highest level, there is still however a problem in that some politicians, civil servants and local leaders, remain misinformed and opposed to government family planning policies. The main solution to this is a comprehensive multi-sectoral approach to population IEC integrated with on-going development programmes such as the District Focus for Rural Development. This approach will require frequent internal monitoring and evaluation to gauge progress and make adjustments in line with socio-economic development trends in the country.

In sub-Saharan Africa education has made a fundamental contribution to the development of a productive population. Many countries have been willing to make heavy investment in education in the belief that it is an important factor in development. A multi-sectoral approach to population education is no less important since it contributes positively to overall development through fertility and mortality reduction, improvement in health and nutrition and management of resources including higher agricultural productivity. It is, therefore, essential that due emphasis be given to population education, both formal and non-formal at all levels of training and for all levels of society if national development goals are to be achieved.

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ANNEX

CONTENT AREAS IN POPULATION EDUCATION

Population Factors

– Sources of Population Data
– Methods of measuring and projecting population data
– Population size, composition, structure and distribution
– Demographic processes: fertility, mortality and migration
– Population trends at national, regional and international level
– National population policy
– Population related issues and problems

Interrelationships between Population Factors and Socio-economic Development

1 – At national (macro) level

– Economic development (production and distribution of goods and services standard of living)
– Social development (provision of social infrastructure and services, measures of equity)
– Specific national development policies related to population (e.g. Food, Education and Health policies)

2 –At sub-national (micro) level

(a) Family and community Welfare
– Community and Family life: role, function and interrelationships between family members in community.
– Family Welfare: basic needs – food, clothing, shelter hygiene, health, education, employment, etc.
– Traditional and changing values and practices which influence family welfare and community wellbeing
– Status of women.

(b) Human Growth and Development
– Human reproduction
– Child spacing and family planning
– Family size and responsible parenthood
– Family Health
– Management of family resources.

for this hesitancy is an effective Information, Education and Communication (IEC) programme to educate them in the context of well articulated national development and population policies. The full appreciation and understanding of the inter-relationship between population and development by opinion leaders and implementors of government policy will lead to rural people being able to adopt values and take decisions with regard to smaller family size and consequent higher standards of living.

In Kenya for example, there has been since 1983 strong commitment by government and the KANU party leadership to slow down the rate of population growth (estimated at 4.1% per year). Despite this commitment at the highest level, there is still however a problem in that some politicians, civil servants and local leaders, remain misinformed and opposed to government family planning policies. The main solution to this is a comprehensive multi-sectoral approach to population IEC integrated with on-going development programmes such as the District Focus for Rural Development. This approach will require frequent internal monitoring and evaluation to gauge progress and make adjustments in line with socio-economic development trends in the country.

In sub-Saharan Africa education has made a fundamental contribution to the development of a productive population. Many countries have been willing to make heavy investment in education in the belief that it is an important factor in development. A multi-sectoral approach to population education is no less important since it contributes positively to overall development through fertility and mortality reduction, improvement in health and nutrition and management of resources including higher agricultural productivity. It is, therefore, essential that due emphasis be given to population education, both formal and non-formal at all levels of training and for all levels of society if national development goals are to be achieved.

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ANNEX

CONTENT AREAS IN POPULATION EDUCATION

Population Factors

– Sources of Population Data
– Methods of measuring and projecting population data
– Population size, composition, structure and distribution
– Demographic processes: fertility, mortality and migration
– Population trends at national, regional and international level
– National population policy
– Population related issues and problems

Interrelationships between Population Factors and Socio-economic Development

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– Management of family resources.

Alfredo TABORGA*

POPULATION COMMUNICATION: THE LATIN AMERICAN EXPERIENCE

LATIN AMERICA AND THE CARIBBEAN

The region comprises the lands and peoples of Mexico (1), Central and South America and the Caribbean Islands. It covers some 20,516,399 km2, about 15% of our planet's land area.

As far as population is concerned, Latin America is the fifth most populous area in the world. It features a wide variety of ecological zones. Because it has a broad range of soil types and climatic belts, its store of renewable resources is correspondingly varied.

In Central America, the population is concentrated in the valleys, on the central and fringe plateaux of the mountain chains, and along the coastal strips running parallel to the Pacific and the Atlantic Oceans.

The Caribbean sub-region comprises of various islands grouped in a number of archipelagos including Cuba, Jamaica, Puerto Rico, San Domingo, an island shared by Haiti and the Dominican Republic, Barbados, Trinidad and Tobago, the Bahamas, Granada, Saint Lucia, Saint Kitts – Nevis – Anguilla, Antigua, Aruba, Dominica, Guadeloupe, Saint Vincent and the Grenadines, the British Virgin Islands, the Turks and Caicos Islands and the Leeward Islands.

The peoples of continental Latin America are Spanish-speaking, except for the population of Brazil, over whose 8,511,965 square kilometers of territory the official language is Portuguese. On the Caribbean islands, however, in addition to those countries where Spanish is the national language, a number of countries use French, English and Dutch.

It should be remembered that even though the Spaniards were the main colonial power in the region, followed by the Portuguese, there is no single ethnic feature that defines the population of Latin Ameri-

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(1) Mexico takes up the southern end of North America and the northern end of Central America.

ca. The characteristic features of the region's people can be traced back to the different levels of cultural development reached by indigenous societies before the Europeans arrived (the Maya culture in Mexico and the Inca culture in Peru being outstanding examples), the form taken by the commercial exploitation of the new lands, and the characteristics of extracontinental migratory currents. From the overall mix, a number of sub-regional specificities may be distinguished. For instance, in Central America, 40% of the population is made up of indigenous groups, the remaining 60% comprising of mixed European and African strains, the proportions varying from country to country (2).

In the Caribbean islands, approximately 60% of the population is made up of people of African and mixed descent, while 40% are of European descent (3). In the Southern cone of the continent, the area shared by Argentina, Chile and Uruguay, the population is typically white, with only a slight admixture of blacks, or even, as in Argentina and Chile, non at all. Indigenous populations are hard to find, and those that exist are on the way to final extinction.

In the Andean region, whose main components are Peru, Bolivia and Ecuador, mixed groups make up a majority of the population, with substantial proportions of indigenous African and European strains. The largest concentrations of indigenous peoples are to be found in this zone. In Bolivia, for instance, 54% of the total population is indigenous, 31.2% mixed, and 14.8% white (4).

In spite of these ethnic differences, the entire Latin American area faces a set of similar problems which may be summed up under the following four general headings:

– An inadequate agrarian structure;
– Unchecked urban growth;
– High illiteracy and school drop-out rates; and
– The underevaluation of the area's natural products by the developed countries.

At the turn of the last century and the beginning of the twentieth century, Latin America embarked on a process of industrialization. In some countries, this process was more intensive that in others – a fact reflected in uneven levels of development within the area. In addition, the rate of population growth accelerated at the beginning of this stage.

(2) United Nations Department of Statistics. Figures quoted in the *Diccionario Geografico*. Editorial America, S.A., 1984.
(3) Idem.
(4) CEPAL: Notes on Economics and Development (Spanish). No. 403. October 1984.

Up to 1920, the twenty-four Latin American countries had a total population of 87 million. This figure was slightly more than double the population in the same area four centuries back, when the Europeans arrived. In 1920, the total population of 87 million meant an annual geometrical growth rate of 0.5%. Contemporary studies of the time projected a doubling of the population in another 140 years. According to those calculations, the area was expected to reach a total population of 174 million in the year 2060 (5).

As it happend, however, by the 1960's, the area had already attained a total population higher than 280 million, and the rate of geometrical growth of the population stood around 2.9% annually. Projections based on this new state of affairs indicated that by the year 2000 the continent's population would have reached 600 million, and that the total population could reach 1,500 million by the year 2060 if current trends continued unchecked (6).

What in such a short lapse of time, had caused this rise in the annual growth rate from 0.5% to 2.9%? (7).

In the mid-1930's, the entire American continent experienced a gradual drop in maternal and infant mortality rates. This drop sparked off a phenomenal population surge unprecedented in Latin America. In concrete terms, the drop in infant mortality and the improvement of health conditions meant that larger numbers of human beings had to live within the same spatial limits in which high mortality rates had previously served to keep population levels relatively low (see Table 1).

For this accumulation of human beings, life began to pose a number of problems. The people were inhabitants of a continent richly endowed with natural resources. Nevertheless, their living conditions became increasingly complicated.

The solutions advanced by inadequate development models for dealing with the problem of the rising tide of needs ended up turning the continent's population growth into a headache, even when it was clear that population growth *per se* was not the root of the severe troubles now afflicting the area. Among the various symptoms of this situation, it is possible to cite inequable rural structures, inadequate educational coverage at the basic, intermediate and professional levels, the establishment of undemocratic systems of resource distribution, etc.

(5) Dr. Benjamim Viel, «The Population Explosion in Latin America» (Spanish) in *Poblacion y Planificacion Familiar en America Latina*, No. 17.
(6) Idem.
(7) This percentage was registered in the five-year period 1960-1965. Since then, the rate of population growth has dropped slightly, to 2.6% from 1965 to 1975, 2.4 from 1975 to 1980, and 2.3 from 1980 to 1985.

As a direct consequence of all this, the increased population has had to face the additional problem of increasing unemployment rates. Certified figures reached an average of 10.2% in 1983; in 1984, they rose to 11.1%. In 1984, it was officially calculated that there were about 6.400.000 unemployed in the continent's cities (8).

Simultaneously, the process of uneven internal development has led to a number of extremely peculiar changes in the Latin American countiries. Of these changes, one of the most important as well as the most spectacular, has been the dizzying phenomenon of urbanization.

At the moment, the urban population already makes up two-thirds of the total population. It has absorbed a steady influx of migrants from the rural areas. This situation has bestowed on Latin America the dubious distinction of having some of the world's largest cities. By the end of this century, the situation is expected to get even worse.

«Of the 29 urban conglomerations with current populations of over 5 million inhabitants, 19 are situated in developing countries. By the year 2000, there will be 59 such cities, and 47 of them will be in Latin America», according to Javier Perez de Cuellar, the United Nations Secretary-General (9). According to United Nations estimates, Mexico City, Capital of Mexico, will be the world's most gigantic city by then, with a projected population of 31 million inhabitants. It will be followed by Sao Paulo and Brazil with about 25.8 million (10).

The youth, who constitute the greater part of the population in Latin America, demand improved living conditions. This means the provision of many more services and facilities: Hundereds of thousands of new schools, hospitals, welfare centres, as well as millions of new job outlets, housing units, community services, etc. The population is on the rise, and everyday it demands with increasing intensity, concrete solutions leading to a better present and a hopeful future for its offspring.

THE REGIONAL PROGRAMME

Latin America has acquired a heightened awareness of demographic problems and their relationship to development, as well as of the need to intensify work in this field. It was thus perfectly appropriate that Mexico was selected last August to host the International Confe-

(8) Victor Tokman, Director of the Regional Employment Programme for Latin America and the Caribbean (PREALC), in the *CEPAL Newslater* Spanish, 19 October 1984.

(9) Javier Perez de Cuellar, United Nations Secretary-General, Speech before the International Conference on Population, Mexico, 6–13 August, 1984.

(10) Idem.

rence on Population. This was the second time in history that the world's nations met to study and discuss problems related to the number of persons inhabiting the world now and in the future.

From all parts of the Region, voices were raised stressing the fact that the problems of population and development are indissolubly linked. The Mexican President, Mr. Miguel de la Madrid pointed out during the inaugural session that: «There is a convergence of national and international efforts. The issues of humanity, of population and of development, require the mobilization of internal forces in a permanent national programme; they also require international co-operation to facilitate the removal of external obstacles, thus clearing the way of international solidarity» (11).

The Chief Delegate of Bolivia, Hernan Siles Suazo stated that «the population, the social underpinning of the nation, is the subject as well as the ultimate objective of economic and social development, and therefore of all policies designed to promote such development»(12).

Expatiating on the Latin American vision of this problem, the President of Columbia, Belisario Betancur-Cuartas, has recognized «that we, the (rulers) of Latin America and the Caribbean, have taken stock of the population problem. That, however, is not enough to create greater independence and improved welfare for the population. This can only come about to the extent that the rich, industrial North cooperates more actively in the consolidation of this new international order. Let the struggles aimed at hegemony cease; let the enormous resources devoted to the industry of death and to the reproduction of regional conflicts in the underdeveloped countries be switched over to the elimination of backwardness and misery in our nations» (13).

The level of awareness referred to, however, generally involves statemen, scientists and social scientists. It has yet to be reflected in activities rigorous enough to break through, once and for all, the vicious cycle in which demographic problems are caught. With few exceptions, the politicians are undecided. They make frequent speeches, but they have had no success in turning the vision of population and development into solid, active reality.

(11) Mr. Miguel de la Madrid, President of the United States of Mexico, Speech at the inaugural session of the International Conference on Population, organized by the United States Fund for Population Activities, Mexico. August 1984.

(12) Speech by the Bolivian Delegate, published in *Population Prospects: Statements by World Leaders* (Spanish) United Nations Fund for Population Activities (UNFPA), New York, 1984. p. 17.

(13) Speech by the Colombian Delegate, *Ibid.* p. 25.

In the relatively young democracies of Latin America, the implementation of the concept of development is rather far from the meaning given to that conept by scholars and writers on politics and the social sciences.

The participation of peoples and citizens is correlated to this situation, and as a rule, governments have focused on the issue of population, highlighting such extremely sensitive priorities as mother and child care, which incorporates family planning within a challenging perspective.

On the other hand, the services and information provided are generally inadequate to satisfy actual and potential demand for family planning in the rural sectors. This in turn means there is a communication problem.

The deterioration of rural living conditions, falling investment in the sector, and the lack of opportunities there invariably constitute a stimulus for the endless rural exodus towards the cities. This migration results in subhuman living conditions and an increasing deterioration of the environment.

Among the resultant problems, we may cite that of unwanted pregnancies among adolescents, as well as the sometimes tragically high rates of abortion and death related to this situation.

As a general observation, it can readily be seen that the implementation, proliferation and deepening of educational communications processes are indispensable. For at each of the levels described above, there is a communications block making it impossible to educate, to instruct, to inform and to disseminate information adequately and in good time. The more the various rulers agree that the practical process of communication has purposes other than the dissemination of self-serving propaganda, the easier it is to conduct activities involving the people in an awareness of their realities and in possible ways of changing this reality, while simultaneously accepting the fact that an awareness of population problems results in various forms of compromise between the rulers and the ruled.

Within this perspective, the Regional Programme of Rural Communication for Latin America and the Caribbean (14) is aimed at helping national organizations both official and private, conduct activities related to communication and population issues, by creating systems for diffusion, for personnel training, and for intermediate and mass communication. To the extent permitted by its resources, the Pro-

(14) The Regional Programme of Rural Communication has its headquarters in the Regional Office of Education for Latin America and the Caribbean (OREALC), located in Santiago de Chile. It is directly responsible to the Population Division of the Social Sciences and Humanities Sector of Unesco in Paris.

gramme attempts to satisfy a steadily rising need for direct technical assistance in project formulation and evaluation, in the design of strategies, and in personnel training in the field of rural communication.

In the development of activities within the context of the region's realities, it has to be pointed out that technological media as simple as the radio (with a distinguished record of educational experience in some countries) co-exist with media of a much more sophisticated range, basically of the visual type.

Commercial open circuit television, under government or private ownership, short circuit television and the state-of-the-art technology of video cassettes, all modulate the demand for and regulate the supply of services provided by the Programme. In tune with the realities of this situation, attention is being paid to the key sector of personnel training. This work necessitates a two-dimensional approach: First there must be practical knowledge and sure control of current communications technology; secondly, the methodology used must be based on the successful reproduction of relevant individual items, the proliferation of trained personnel and the achievement of self-sufficiency in this area by the various institutions and countries involved.

The Regional Programme for Rural Communication has been in operation since August 1973. From the beginning, it developed a series of activities in its area of comptence throughout the countries in the Latin American and Caribbean zone. According to recent indications, since 1980, the Programme has provided help to the following Member States: Haiti, Jamaica, the Dominican Republic, Cuba, Costa Rica, Honduras, El Salvador, Panama, Colombia, Ecuador, Peru, Paraguay, Brazil, Mexico, Bolivia and Guatemala.

This effort has resulted in direct training for 700 professional personnel. According to surveys conducted by the Programme, in practice, this training has affected about 3.000 more persons as a result of work done with the materials the original 700 were trained to work with.

The basic components of the direct training programme have been regional and sub-regional seminars, courses and workshops. In addition, audio-visual materials dealing with population issues have been produced and distributed, as well as six different texts.

NEXO, a supporting magazine, has been published since 1982. It is intended for professionals who have already participated in the training activities organized by the Programme. This publication serves to provide continuous indepth instruction and follow-up supervision to supplement knowledge acquired in the field of Population Communication. The magazine publishes articles on important work in the field done in the region, with the purpose of sharing information on current work and innovations, and in order to provide universally profitable opportunities for using the original solutions and alternatives genera-

ted by all the various specific experiences in response to the daily challenges confronting them.

In addition, the magazine provides bibliographic references, theoretical and practical instructional support and up-to-date materials in the field of Population communication and development.

The magazine *NEXO* is also part of the supervisory system of the Programme's training activities, mainly because it facilitates direct correspondence with all former participants in its various courses and seminars, as well as through the periodical surveys it conducts on the usefulness and relevance of the knowledge disseminated.

In the accomplishment of its duties, the Programme uses the services of a Regional Adviser, a bilingual Executive Secretary, and consultants working on an *ad hoc* basis.

In sum, the Regional Programme does all it can to collaborate with Member States in solving the zone's important population problem. In this approach, it is constantly mindful of the fact that, as pointed out by the United Nations Secretary-General Javier Perez de Cuellar, «if development is delayed or held back as was the case in former years in most developing areas, the successful implementation of demographic policies is automatically endangered» (15).

We cannot afford to overlook this reality, since, as the UNFPA Executive Director, Raphael Salas has pointed out, we cannot forget that «even if population pressure alone does not necessarily cause conflicts, when combined with other economic, political and social factors it may become a critical element» (16).

(15) Javier Perez de Cuellar, United Nations Secretary-General, Speech before the International Conference on Population, Mexico, 6–13 August, 1984.

(16) Rafael Salas, Executive Director, United Nations Fund for Population Activities (UNFPA), Speech before the International Conference on Population, Mexico, 6–13 August, 1984.

TABLE 1*

SOCIAL DEVELOPMENT AND WELFARE – URBAN POPULATION GROWTH

Average annual growth rates of the population in localities with more than 20 000 inhabitants in 1970

Country	1950-1960	1960-1970
Argentina	2.8	2.4
Barbados	0.5	0.7
Bolivia	4.7	3.9
Brazil	5.5	5.4
Colombia	6.1	4.0
Costa Rica	4.2	3.3
Cuba	2.7	3.0
Chile	3.8	3.5
Dominican Republic	6.0	6.2
Ecuador	5.3	4.6
El Salvador	4.1	4.1
Guatemala	4.9	2.2
Guyana	10.0	10.3
Haiti	5.2	5.4
Honduras	6.0	5.8
Jamaica	3.7	2.4
Mexico	4.4	4.6
Nicaragua	4.9	5.6
Panama	6.1	4.6
Paraguay	3.4	4.3
Peru	5.0	5.8
Trinidad and Tobago	0.6	0.8
Uruguay	1.7	0.8
Venezuela	6.7	4.9
Total	4.4 (1)	4.3 (1)

* Extracted from Statistical Yearbook for Latin America, 1983 – Economic Commission for Latin America, United Nations Publications.

(1) Rate calculated assuming a ten year intercensal period.

TABLE 2*

SOCIAL DEVELOPMENT AND WELFARE / LIFE EXPECTANCY AT BIRTH (1) (Years)

Country	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980 1985
Argentina	62.7	64.7	65.5	66.0	67.3	68.7	69.7
Barbados	57.5	...	66.0	67.6	69.1	70.0	71.1
Bolivia	40.4	41.9	43.5	45.1	46.7	48.6	50.7
Brazil	51.0	53.4	55.9	57.9	59.8	61.8	63.4
Colombia	50.7	53.5	56.2	58.4	60.4	62.2	63.6
Costa Rica	57.3	60.2	63.0	65.6	68.1	71.4	73.0
Cuba	58.8	61.8	65.1	68.5	70.9	72.8	73.5
Chile	54.1	56.1	57.6	60.6	64.2	65.7	67.0
Dominican Rep.	45.1	49.1	52.6	55.4	57.9	60.3	62.6
Ecuador	46.9	49.6	51.9	54.6	57.1	60.0	62.6
El Salvador	45.3	48.6	52.3	55.9	59.1	62.2	64.8
Guatemala	42.7	45.4	48.2	51.2	54.6	57.8	60.7
Guyana	56.0	...	62.4	65.2	67.9	69.1	70.5
Haiti	37.6	40.7	43.6	46.3	48.5	50.7	52.7
Honduras	42.2	45.0	47.9	50.9	54.1	57.1	59.9
Jamaica	57.9	...	65.8	67.8	69.5	70.1	71.2
Mexico	50.8	55.4	58.6	60.3	62.2	64.1	65.7
Nicaragua	42.3	45.4	48.5	51.6	54.7	56.3	59.8
Panama	55.3	59.3	62.0	64.3	66.3	69.2	71.0
Paraguay	51.9	54.5	56.6	59.6	63.1	64.1	65.1
Peru	43.9	46.3	49.1	51.5	55.5	56.9	58.6
Trinidad & Tobago	57.8	...	65.8	67.8	69.5	68.9	70.0
Uruguay	66.3	67.2	68.4	68.6	68.8	69.6	70.3
Venezuela	52.3	55.7	58.9	61.9	64.5	66.2	67.8
Total (2)	51.6	54.4	56.8	58.8	60.9	62.8	64.4

* Statistical Yearbook for Latin America, 1983, op. cit.

(1) The average life expectancy in years of a newborn child belonging to a hypothetical cohort who is subject to a given rate of mortality throughout life.

(2) Excluding the English-speaking countries of the Caribbean.

TABLE 3*

SOCIAL DEVELOPMENT AND WELFARE

Television receivers per thousands inhabitants

Country	1960	1965	1970	1975	1976	1977	1978	1979
Argentina	22	72	146	173	170	171	168	170
Barbados	.	26	67	163	194	198	195	193
Bolivia	.	.	...	9	10	10	9	18
Brazil	17	28	64	97	95	97	104	127
Colombia	10	19	39	69	72	76	..	79
Costa Rica	2	34	58	76	77	77	74	73
Cuba	71	71	68	64	67	84	102	115
Chile	0.1	6	53	69	68	...	113	112
Dominican Rep.	...	13	23	32	32	...	47	55
Ecuador	0.5	8	25	37	42	46	48	51
El Salvador	8	12	26	33	32	34	40	59
Guatemala	8	12	13	18	19	23	22	...
Haiti	0.5	2	2.4	2.6	2.7	2.6	2.5	2.6
Honduras	0.7	1	8	15	15	14	14	14
Jamaica	.	14	37	54	54	57	56	77
Mexico	18	28	58	...	...	86	85	111
Nicaragua	3	9	27	34	36	39	46	...
Panama	10	55	95	109	106	115	112	117
Paraguay	.	.	15	20	20	19	19	19
Peru	3	18	30	33	46	52	...	50
Trinidad & Tobago	0.0	21	58	97	100	112	124	130
Uruguay	10	74	92	124	125	126	126	125
Venezuela	33	71	72	98	105	109	...	113

* Statistical Yearbook for Latin America, 1983, op. cit.

SUMMARY OF COUNTRY-LEVEL ACTIVITIES IN POPULATION EDUCATION IN THE AFRICAN REGION: UNESCO EXPERIENCE

BENIN

Title of the Project: Family life and Population Education

Sex education was defined as one of the components of the national programme for building up the new school in Benin. Since 1977, the Beninese Government has tried within the framework of the BEN/76/P01 Project a sex and population education programme at school. Sensitization seminars were held in 1977 and 1978 at the national and provincial levels. A survey was also carried out on the needs of pupils, parents and teachers in the field of sex and education. In order to continue efforts undertaken a new project was approved under the title BEN/83/P01: Sex and Population Education at School. The project which was launched in 1984 aimed essentially at introducing sex education into the curricula and the preparation of training materials as well as the introduction of sex and population education into the curricula of a sample of pilot schools pending its later generalization in the whole Beninese school system. Following the national training seminar of the project lead team, its title was modified to become family life and population education. This title seems to better reflect the preoccupations of the Government and educators.

BURKINA FASO

Title of the Project: National Population Education Programme

Since 1976 the Burkinabe Government has launched a national population education programme within the framework of the National Institute for Adult Training and Education (INAFA). This programme was carried out in three phases:

– A sensitization phase (UPV/76/P01) started with the organisation of a national seminar to sensitize the Government cadres to population issues. It was followed up by a second national seminar on the introduction of sex education in the Burkinabe educational system and the publication of a Poped sourcebook the first of its type in the region. The media were widely used during that campaign.

– An experimentation phase (UPV/77/P01) was carried out from 1980 to 1984. During that experimental phase 85 secondary school teachers and social educators were trained, sex education was taught in 53 secondary classes and six social centres and various training centres for youths and adults of the non-formal system. One of the

important results of this phase was the need to include sex education within the wider framework of population education. Since 1985 the Programme has embarked upon its institutionalization phase (BKF/84/P01) and generalization of population education (Poped) in the educational system. A strategy was defined and a ten year planning programme was worked out for the formal educational system. This planning aims at the institutionalization of Poped in the formal system in Burkina at the end of this period. This phase will lead to the split of the national programme into two components: one programme for the formal system to which an appropriate institutional framework should be found and a programme for the non-formal system which will be implemented by the Ministry of Family Development and National Solidarity with the technical support of ILO.

IVORY COAST

Title of the Project: National Health and Family Education Programme

Since 1977 the Ivorian Government has launched a national programme of family life and population education programme within the framework of IVC/76/P03 projects: Family life education under the aegis of the Ministry of Women Affairs and IVC/76/P02: Population Education under the aegis of the National Commission for Unesco. These projects aimed at the sensitization of states cadres and educators to population and Family life issues in Ivory Coast, so that they decide on the appropriateness of the introduction in the educational system. Following this sensitization phase, two requests were submitted to UNFPA one of which IVC/77/P01: Training of Educators in Family Life was approved but was not executed. In 1983 the project was reformulated and integrated into the national health and family education programme. When approved in the form of pre-project the activities of this programme were evaluated. Thus, through their co-operation the two ministries of Health became aware of the need to adopt a multidisciplinary approach to health problems. The project itself was reformulated and submitted to UNFPA in its integrated form. This project among others aims at the development of mother and child health care and the introduction of family life education in the non-formal system programmes.

GABON

Title of the Project: Population Education in First and Second Degree Education and Teacher Training

This project (GAB/79/P03) submitted to UNFPA in 1979 is still awaiting approval. It aims among other things the integration of population education component into the curricula of primary and secon-

dary schools, as well as those of teacher training colleges, the production of corresponding educational guides, the training of 1232 teacher-trainees, 180 future secondary teachers, inspectors and in-service educational advisers.

GUINEA

In 1982 the Guinean Government submitted to UNFPA a request for the funding of a project for the introduction of population education in the school system. This project aimed specially at sensitizing the government cadres on population education and the training of a core of trainers able to launch further programme. This project GUI/82/P01 which launched its activities in 1983 enabled the training of two national officials in the field of population education and the sensitization of over 120 government cadres at various levels in particular all education officers at the national and provincial levels.

Since 1984 the second phase of the programme has started with the GUI/84/P02 project: Population education at school which aims at the following main objectives:

– Training of trainers;
– The introduction of population education in primary school curricula; and
– The experimentation of population education in 16 pilot schools. In case of success this experimental phase should lead to the institutionalization of population education at school.

KENYA

Title of the Project: Population and Family Life Education in Kenyan Schools and Teachers' Colleges

The Government of Kenya in late 1985 prepared a project document intended for submission to UNFPA for funding support and to Unesco for technical assistance. The Government plans to introduce population education as a separate subject and on a pilot basis at the upper primary classes, at all the secondary classes, and the teachers' training colleges. The emphasis during the pilot phase will be on training of Kenyans on population education in order to ensure a strengthening of the necessary human resources in this field, and leading to early self-reliance. The project aims, inter alia, at testing the feasibility of introducing population education as a separate subject at the various educational levels as well as creating awareness and understanding among learners and their teachers of the interrelationships between population phenomena and the availability of resources for the improvement of individual, familial, and national welfare.

MADAGASCAR

Title of the Project: Population Education: Sensitization and Training of Trainers

In 1981 the Malagasy Government submitted a request for funding of a population education project to UNFPA. Placed under the aegis of the Ministry of Population, Social Condition, Youth and Sports with the cooperation of the Ministry of Basic and Secondary Education and other ministries this project (MAG/81/P01) intends to set up the conditions for the establishment of population education necessary for the country at the school and out of school levels.

In the first phase the project should promote various sensitization and prospective reflection activities on the educational needs in the various development sectors that should lead to programme proposals. In second phase and on the basis of the results obtained during the first phase, emphasis will be laid on the training of trainers, curriculum development and preparation of corresponding educational materials.

Within the framework of the project, a Poped documentation Centre was established, sensitization activities and a socio-demographic survey were carried out. The project aims ultimately at the introduction of population education in basic education programmes, socio-economic development centres (CPSE).

MAURITANIA

Title of the Project: Population Education and Training of Trainers

Submitted to UNFPA in 1979, reformulated in 1980 on the basis of its comments this project should be reformulated very soon again. Its initial objectives were:

– Integration of population education into the curricula of teacher training colleges (ENI, NES);

– Preparation of educational guides for the trainers of educational technology and efforts in educational innovations carried out by the «Institut Pédagogique National» in training teacher trainees in colleges;

– Training of all trainers of the Teacher Training colleges (ENI); the training of national counterparts in curriculum development and training of trainers.

MAURITIUS

Title of the Project: Population and Family Life Education in-school and out-of-school (MAR/84/P01)

The Government of Mauritius in co-operation with UNFPA and Unesco has since 1983 developed a programme for the systematic

introduction of population and family life education into the in-school and out-of-school education system. The Mauritius Institute of Education which is the body responsible for curriculum research and development has introduced population and family life education content into the syllabi of Integrated Science and Social Studies at the secondary level.

NIGER

Title of the Project: Population Education, Sensitization and Information (NER/83/P02)

In 1983 the Government of Niger sought for UNFPA funding support and Unesco technical assistance to introduce population education into the country's education system. The objective of the project is to help find an effective educational response to a range of social problems identified in the country's economic and social development plan of 1979-1983. The project began by sensitizing government officials and educators and by stressing the linkages among population issues, socio-economic development, the environment on one hand and education in such related areas as family life, sex education, health and nutrition education, family planning and environmental education. The project draws its support from an inter-disciplinary, and inter-ministerial group involving many ministries and associations.

NIGERIA

Title of the Project: Comprehensive Population Education (NIR/83/P01)

A comprehensive population education project was launched in Nigeria in 1983 among other objectives:
– To assist the government in realizing its main policy thrust in the population sector, namely to formulate measures to ensure the effective mobilization of the country's human and material resources for development, and
– To make the Nigerian people aware of the benefits and other consequences of their population behaviour, and
– To incorporate population education into the different levels and sectors (formal and non-formal) of education. This project is jointly funded by the Nigerian Government and the United Nations Fund for Population Activities, and Unesco provides the technical support. The Nigerian project is distinctive in the extensive use it makes of local resource persons. For example, programme development is operated through the aegis of five sub-committees composed of national special-

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ists in the fields of:
– Research and Evaluation,
– Curriculum,
– Teacher Training,
– Population Awareness (Communication), and
– Educational materials Production.

This project is located within the Nigeria Educational Research Council, the body charged with curriculum research and development for the country.

SENEGAL

Title of the Project: Population Education

The SEN/79/P03 submitted to UNFPA by the Senegalese Government is awaiting approval. This project which has very ambitious objectives aims at the introduction of population education both in formal and non formal education. The Government recently reaffirmed its will to implement a family life education within the formal system.

SEYCHELLES

Titles of the Projects: Assistance to National Family and National Welfare and Educational Programmes (SEY/76/P01), and Family Life Education in National Youth Service (SEY/82/P02)

In 1979, the Government of Seychelles began to implement a programme aimed at developing awareness of responsible parenthood by developing a sex education programme in the primary and secondary education system. This programme benefited from UNFPA funding support and occasional technical assistance from Unesco. Following a positive evaluation of the programme early in 1981, UNFPA-funding support was extended, enabling the Government to develop a special programme for the National Youth Service Villages where adolescents aged 15-17 years are kept in residential training for two years. The programme has among other things, developed syllabi for primary grades P1 to P9, and training materials for the out-of-school women and youths.

SIERRA LEONE

Title of the Project: Integration of Population Education into the School Curricula – In-Service and Pre-Service Teacher Education (SIL/76/P01)

Sierra Leone is one of the first few sub-saharan African countries to introduce population education into its formal education system. In 1976 the Government of Sierra Leone submitted a request for

UNFPA funding for the purposes of:
– Training a core of Sierra Leoneans to be qualified in population education, and
– Integrating population education concepts into the curricula of secondary schools and teachers' colleges. The UNFPA in co-operation with the Government of Sierra Leone began to fund the project in 1977 with Unesco providing technical assistance. At the end of this project in December 1983, it had succeeded in introducing population education as an integral part of social studies in the Secondary classes I to III in the pilot schools as well as in the Milton Margai Teachers' College.

The second phase of this project is called «Integration of Population Education into Secondary Schools Curriculum» (SIL/85/P01). This phase, starting in 1985, aims *inter alia* at integrating population education into biology and home economics.

SOMALIA

Title of the Project: Assistance to Population Education Activities (SOM/79/P07)

In 1981 the Government of Somalia launched a population education programme into the country's education system. The objective was, among other things, to integrate population and family life education into the curricula of primary and secondary schools as well as into the curricula of teacher training colleges. This project is jointly funded by the Government of Somalia and the UNFPA and technically assisted by Unesco. The project has spread into the out-of-school sector, and has developed several innovations in population but also to the field of population education in general. In 1984, the project sucessfully organized a programme for study tours from another African country. Following the capacities that have already been developed, the Somali Project may likely, increasingly, be requested by new projects in other African countries to host study tours.

TANZANIA

Titles of the Projects: Assistance in training for responsible parenthood in family welfare (URT/83/P06), and Preparatory Assistance for Population/Family Life Education in Tanzania Schools (URT/85/P01)

In 1983 the Tanzanian Government began to implement an out-of-school project which aims at changing through education the attitudes and behaviour of Tanzanian fathers towards child-spacing. This project which is funded by UNFPA, receives Unesco technical assistance. It is

located at the Tanzania Parents Organization (WAZAZI) which is a major organ of the Party attached to the Prime Minister's Office. The project has produced instructional materials and trained about 150 WAZAZI Regional and District Secretaries to incorporate lessons in responsible parenthood into the regular WAZAZI meetings.

In 1985, the Tanzanian Government through the Education Ministry has also taken preliminary steps to introduce population and family life education into the country's formal education system. Funding support and technical assistance are being provided by UNFPA and Unesco, respectively.

TOGO

Title of the Project: Sex Education in School

Togo is one of the first French-speaking African countries to be aware of the importance of sex and family life education in solving problems experienced by the youth, specially the educated ones. It has been implementing the TOG/76/P02 project since 1976. This 2 phased project enabled the sensitization of about a hundred government cadres during a national seminar and 2000 parents and students at a rally, training abroad of two nationals, information and sensitization of 487 teachers of the various degrees. This project was completed with the organization in 1980 of a national seminar at which the aims and objectives as well as the guidelines of the sex education strategy in Togo were defined. The ongoing TOG/84/P02 project follows up this first phase. It aims among others at:

– The training of trainers;

– Integration of sex education into the curricula of the three levels of education, training of 168 teachers and testing sex education in 23 schools. Three trainers were already trained abroad within the framework of this new project.

UGANDA

Title of the Project: Population and Family Life Education in Ugandan Education system

The Government of Uganda has in 1985 requested for funding support from the UNFPA and the technical assistance of Unesco to enable her introduce population and family life education content into the curricula of secondary schools and two teachers' colleges.

The Government through the National Curriculum Development Centre of the Education Ministry plans to integrate population and family life education into the syllabi of several subjects, starting first with biology and geography. This new project is expected to begin by January 1986.

ZAMBIA

Title of the Project: Introduction of Population Education in Selected Primary and Secondary Schools and teachers colleges (ZAM/85/P03)

A new population education project is underway in Zambia. With funding and technical assistance of UNFPA and Unesco, respectively, the Government of Zambia, through the Education Ministry has in 1985 introduced a programme to integrate population education on a pilot basis into the formal education system. The subjects which are being revised to include population education are social studies, science and home economics. Population education is being introduced at the primary and secondary school levels and at the teacher training colleges. This pilot phase is seen as the preparatory phase for nation-wide introduction of population education.

MOZAMBIQUE*

Title of the Project: Integration of Population Education in Mozambican Schools (MOZ/86/P03)

The Government of Mozambique in late 1985 requested for UNFPA funding support and Unesco technical assistance for the integration of population education into the biology and natural science curricula of the primary and secondary schools and teachers' training colleges. This request has received UNFPA approval. The Education Ministry plans to adopt a strategy of a blend of both pilot and large-scale project in view of the fact that curriculum review for the purpose of integration of population education will constitute a part of the on-going nation-wide educational reform. The project aims at training a cadre of Mozambicans in population education, the design and preparation of appropriate curricula and instructional materials, and at the promotion of the awareness of Mozambican parents and the community on the social and population-related issues and problems deserving of formal education.

* Information made available at the printing stage.

PART III

NOTES

INTRODUCTION

In recent years, African countries have come to recognize the linkages among development, population, environment, and resource policies. African governments now more than ever before, recognize the need to include population as an integral part of socio-economic development planning. They are today willing to sit down and discuss such population matters as population policy, family planning, population education, the role of women, etc... Two factors have produced these dramatic changes of official attitudes. The first is the improved demographic data collection and analysis which have given them a better knowledge of their countries' population situation. The second is the effect of several global, regional, and national recommendations which have consistently drawn the attention of Governments to the role of population factor in development planning.

We reproduce under this section some of these major recommendations the implementation of which might likely improve the standards of living and quality of life of all African peoples in the future.

I – RECOMMENDATIONS OF THE CONSULTATIVE MEETING ON POPULATION EDUCATION

7 – 11 NOVEMBER, 1983, UNESCO–BREDA, DAKAR, SENEGAL

In their individual country papers as well as during the discussions, the participants identified a number of needs and made recommendations in the following areas:

– Pressing needs,
– Strategies;
– Conceptualization of population education; and
– Institutionalization of population education.

PRESSING NEEDS

The meeting noted that in addition to creation of awareness among policy makers and the general public, the most urgent needs of on-going projects in the region are found in the areas of funding, training, equipment and research. The participants, therefore, recommended as follows:

Funding

1 –The initiation of more effective and efficient means of providing new projects with initial grants by the funding agency that will allow a project to undertake preparatory work prior to the arrival of an international expert if approved in the budget.

2 – The initiation and implementation of a system of funding that will allow on-going projects to be in receipt of an initial allocation of funds in the first month of a budgetary year.
3 – The establishment in all project budgets of a budget line (over and above sundries) set at a suggested 5 per cent of the annual budget, that will allow more flexible decision making and action in the field (for example, Exigency...).

Training

An increased emphasis on the practical «in-field training of population education project staff» (through such mechanisms as: project inter-change, study tours, block training in the regional office and in the country projects, etc...) and long term academically oriented fellowships upon commitment to the country population education programme and when it is desirable.

Equipment

The establishment of a system that will permit specific projects to order equipment and supplies directly from duty-free suppliers locally and overseas, following telex authority from the Executing Agency, in order to expedite the delivery and use of such equipment and supplies.

Research

The recognition of research as an essential component of programme development and implementation which should be encouraged at all times, both at the regional and country levels.

STRATEGIES

UNFPA and other specialized agencies

More than the basic needs assessment missions strategies, UNFPA and other specialized agencies such as Unesco, ILO, FAO and WHO should launch national and international campaigns which aim at creating and sustaining awareness of decision-makers and governments on the over all population situation as well as the importance of population education in support of the successful implementation of other projects in the field of population (such as those linked with maternal child health, population census, etc.).

Unesco Regional Office in Africa (BREDA)

1 – In West Africa as well as in East Africa, there should be, besides the regional adviser or the UNFPA Deputy Representative, a consultation and a training centre where appropriate didactic material could be produced.
2 – There is a need to create a structure which should allow projects to receive a minimum supplementary assistance in terms of materials and technical assistance from the regional advisers.
3 – There is a need to organize regional consultative meetings on population education on a more regular basis. This will facilitate exchange of experiences among country projects.
4 – It is strongly recommended to reinforce the population/units in BREDA and ROSTA and to publish a regional newsletter.
5 – For the purposes of 3 and 4 above, a population education Clearing House should be set up as a matter of urgency in BREDA.

Country projects strategies

The participants noted that there exists already a number of different strategies for the development and implementation of population education at country level in countries such as in Sierra Leone, Somalia, Nigeria, etc. They therefore recommended that countries desiring to have a deeper knowledge of the existing strategies in the countries of the region should address their requests either directly to the relevant country projects or to BREDA and ROSTA.

CONCEPTUALIZATION

In the African context the goals and objectives of population education should try to insist more on:

1 – The contribution population education can bring to the social and economic development of the community and the nation.
2 – Not only the importance of individual decision making on population matters but also the important role, the family plays in collective decision making.
3 – The importance of understanding of the social and cultural context in which population education contents are to be integrated.
4 – The facts that low rate of school enrolments and a high rate of drop-out have led to a greater recognition of out-of-school programmes.
5 – The need to sensitize decision makers in Africa on their countries' population situation and problems.

Following the above preamble the participants suggested a general definition of population education for both formal and non-formal systems.

Population education is an educational programme (formal and non-formal) designed to:

– create awareness, and understanding of population issues directly related to social, economic and cultural development of the individual, the family and the nation;

– enable informed decision-making on population matters in order to contribute more effectively towards the amelioration of socio-economic and cultural welfare of the individual, the family, and the nation.

The individual decisions of every citizen on this matter could have implications on the overall national context to which population education should necessarily address itself.

This general definition has implications for the selection of contents and methodology for the purpose of programme development and implementation in the African Region.

THE INSTITUTIONALIZATION OF POPULATION EDUCATION

1 – Institutionalization may be defined as the process by which the Government and National Organizations incorporate appropriate population education programmes into institutions associated with the formal educational system, the non-formal educational sector and institutions which have an informal education function.

2 – In each of these groups of institutions there are key agents who have particular power, and who may extend particular influence upon the institutionalization process especially where institutionalization is involved with an innovative or renovating process (change).

3 – In the formal education system we can identify two such «organisations». At the primary and post-primary institutional levels:

– The Academic Boards of Studies within Colleges and Universities

– The Teacher Trainers (Deans of teacher training colleges).

4 – In the non-formal system we may identify certain types of personnel which have a key role in institutionalization decision making:

– Institutional administrators and managers

– Institutional trainers of non-formal educators.

5 – Insufficient attention appears to have been paid to the informal institutions. Here the key personnel may range from mass media personnel at a national level, through community leaders to parents in the home situation.

6 – In respect of the formal systems of education the process of institutionalization appears to be dependent upon:

(i) The capacity of the innovators to continuously involve the political and administrative decision makers in every strategy designed to bring about institutionalization.

(ii) The establishment of a unit within the Ministry of Development or similar responsible Government Department for determining and selecting suitable institutions within the country for undertaking various in and out-of-school population education programmes.
(iii)The opportunities which the innovators are able to provide for local personnel to take ever increasing responsibility for programme activities (planning, implementation and evaluation).
(iv) The ability of the innovators to persuade system administrators and decision makers and monitors, that the innovation has a national relevance and benefit.
(v) The willingness of funding and executing agencies, to support project and programme inputs through into the institutionalization phase, by emphasizing on-going assistance to «institutions» carrying the programme. (A slower phasing out of assistance).
(vi) The capacity and ability of the innovators to sensitize and educate the key groups of personnel identified above.
(vii) Population education process is the responsibility of the Government and of various decision makers in each country.
(viii) It also forms the basis through which the success or otherwise of programme could be easily and meaningfully implemented and evaluated in the country.

II – SECOND AFRICAN POPULATION CONFERENCE: ARUSHA, UNITED REPUBLIC OF TANZANIA, 9 – 13 JANUARY 1984

KILIMANJARO PROGRAMME OF ACTION ON POPULATION*

PREAMBLE

The Second African Population Conference:

Reviewing the demographic situation in African countries since the first Conference in Accra in 1971,

Reviewing progress made by African Governments in improving knowledge of the populations of the African continent,

Reviewing progress made individually and collectively by African Governments in attaining the goals and objectives of the World Population Plan of Action (WPPA) adopted in Bucharest in 1974,

Recognizing the tremendous efforts made by governments of the region to respond to the development needs of the African people,

Addressing itself to population problems currently affecting development in the African region,

Noting with gratification the individual and collective will and commitment of African Governments to the strategy of self-reliant development as spelled out in the Lagos Plan of Action and Final Act of Lagos and reiterated in the Addis Ababa Declaration of 1983,

Noting with satisfaction African Governments' commitment to the objectives and goals of the Alma Ata Declaration of Primary Health Care as demonstrated in national health policies and programmes,

Recognizing the extensive efforts being made since Bucharest to encourage policy-makers, planners and researchers in the integration of population and development,

Noting with appreciation international, regional, interregional and national efforts to promote demographic training and research in the region,

Noting with satisfaction the growing interest of African Governments in establishing national institutional frameworks for more effective integration of population in national development planning,

Emphasizing that all African population problems will not be completely solved until *apartheid* is abolished from South Africa and Namibia is liberated,

Noting with appreciation the progress made in enhancing the status of women and integrating them in the process of national development,

* Extracted from a publication of Economic Commission for Africa. Same title, no. ST/ECA/POP/1.

Further recognizing the very significant contributions in financial, material and human resources of governments, donor agencies and particularly UNFPA, and governmental and non-governmental organizations providing support for population programme in African countries,

Mindful of the cultural, religious, political, ethnic, demographic, geographical and socio-economic diversities of African countries, member States of ECA,

Mindful that, despite current diversities in national perception of population problems, ECA member and associated member States share certain common concerns about population and development in the region,

Stressing that disarmament, the maintenance of peace and international co-operation and commitment to peace are fundamental conditions for achieving economic and social development,

Committed to the ideal of more equitable distribution of resources at the national and international level,

Advocating closer co-operation and collaboration among governments in their efforts to find lasting and appropriate solutions to population problems of high mortality and fertility, uneven population distribution, poverty, disease, malnutrition and refugees,

Reaffirming its collective commitment to accelerate self-reliant, social and economic development for the well-being of African peoples,

Noting with great concern the rapid rate of population growth in recent years and the stresses and strains which this increasingly imposes on African Governments' development efforts and on the meagre resources at their disposal,

Noting that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so,

Noting further with concern the serious and worsening food situation as well as the devastating effects of natural and man-made disasters,

Adopts the following Programme of Action for African Population and Self-reliant Development.

Background

The Second African Population Conference organized by the Economic Commission for Africa (ECA) and financially supported by the United Nations Fund for Population Activities (UNFPA) was convened in Arusha, United Republic of Tanzania, from 9 to 13 January 1984. The Conference reviewed progress so far achieved in the implementation of the World Population Plan of Action (WPPA) adopted

in Bucharest in 1974 and the recommendations of the Regional Post-World Population Conference Consultation held in Lusaka, Zambia, in April 1975 and identified actions to be taken in the future.

The Conference reviewed conclusions and recommendations of previous population meetings organized in the region and the impact of these on the development of population work in Africa and the implementation of the WPPA.

In conducting these reviews the Conference assessed, *inter alia* the demographic situation in Africa and future trends, progress achieved in conducting population censuses and surveys in African countries, the formulation of national population policies in the context of national development plans and strategies, the formulation and implementation of national population programmes for integrated rural development, reduction in mortality and fertility levels and enhancing women's status in development.

In its assessment of the demographic situation of the African region and future trends, the Conference observed that the African population of about 500 million was likely to double by 2010. Although the continent's population remained a small percentage of world population, the current high levels of fertility and mortality give rise to great concern about the region's ability to maintain even living standards already attained since independence.

The Conference noted the great variation in population and distribution patterns both within each country and between countries, and expressed concern about the rapid rate of urbanization which contributes to rising urban problems in the region.

The rapid increase in urban population demands careful and balanced socio-economic planning which will attain the goals set out in the Lagos Plan of Action for an integrated and self-reliant development strategy for both the rural and urban economies.

High population growth rates in African countries in the last quarter of a century have resulted in a relatively young population. Thus over half the population of Africa is less than 20 years old. This fact has far-reaching social, economic and demographic implications for the future development of the continent.

The drought and refugee problems which have plagued many countries in the region have exacerbated the recurrent food problems, and imposed obstacles in national efforts to improve living conditions and reduce mortality.

Improved knowledge of the demographic situation in the region during the 1970s, thanks to the African Census and the World Fertility Survey programmes as well as other demographic surveys, has shown that the current population will increase considerably by the end of the century. A recognition of this trend has spurred many governments to address themselves to policy and programme issues

related to family planning in the context of maternal and child health programmes, population settlement projects and the greater integration of population variables in development planning.

Experience among most countries in the region has demonstrated that reductions in fertility and mortality are likely to be achieved when relevant programmes are formulated and implemented as an integral part of an overall process of social and economic development. The implementation of such programmes should give due consideration to the specific cultural, ethnic and religious values of each country.

Africa is a region with the most diversified demographic situation in the world. Africa as a whole presents very distinct characteristics and patterns relative to other regions of the world.

In the light of this analysis, the Conference adopted the Kilimanjaro Programme of Action for African Population and Self-reliant Development.

PRINCIPLES AND OBJECTIVES

Principles

(a) Population should be considered as a central issue in development strategies and plans.
(b) Population and development are interrelated.
(c) The right and responsibility of every country to tackle its population problems should be recognized.
(d) The formulation and implementation of population programmes should exploit African Governments' commitment to self-reliant development and regional, interregional and intercountry collaboration.
(e) National population programmes should aim at responding to nationally perceived problems as identified by empirical research findings.
(f) International co-operation in the field of population should respect socio-cultural values.

Objectives

1 – Improvement in the quality of life in the region requires effective programmes to reduce current high levels of fertility and mortality and alleviate the uneven distribution of population.
2 – Provision of programmes that will respond to the needs of sterile and subfecund couples.
3 – Achievement of population growth rates that are compatible with the desired economic growth and social development goals.
4 – Improvement of living conditions in the rural areas to enhance integrated rural and self-reliant development aimed at stemming current rural to urban migration.

5 –To evolve urbanization policies and programmes aimed at developing medium-sized cities and improving living conditions of the metropolitan areas and capital cities.
6 –To improve and increase national expertise in the population field especially training, research and programme management and implementation capabilities.
7 –To sustain and develop ongoing efforts in demographic data collection and analysis for economic and social development planning and use of data.
8 –To improve population information exchange for enhancing national interest and international co-operation.
9 –To promote population policies and programmes which enhance the status of women in development.
10– To promote population policies and programmes which respond to the needs of special groups.
11– To promote the formulation and implementation of comprehensive population policies which provide lasting solutions to the major problems of high mortality and fertility, uneven population distribution, growing unemployment, stagnation of living standards and unequal income distribution.
12– To promote policies which enhance and protect the rights and welfare of children.

RECOMMENDATIONS

To Governments of Member States of ECA

Population and development strategy and policy

1 –Population should be seen as a central component in formulating and implementing policies and programmes for accelerated socio-economic development plans.
2 –National efforts to enhance the use of demographic data in development planning should recognize the interrelated nature of population and development.
3 –Greater efforts should be made to create increased awareness of the importance of population in the development process and highlight the need for more education and information on the social and economic consequences of demographic changes on national development strategies in health, education, housing, employment and nutrition.
4 –In order to integrate population in the development planning process, governments are urged to create or strengthen high-level population units which ensure adequate integration of population and development policies and programmes especially in rural areas.

5 –National plans should aim at maximizing the productivity of work by men and women and creating the atmosphere suitable for ensuring balance between population and economic growth.
6 –Efforts to integrate population and development should aim at producing a healthier, less dependent and more productive population.
7 –National efforts to create greater awareness of the interrelationships between population and development should include the provision of greater information to politicians and policy-makers and the public on the dynamics of population change and the impact of such change on current and future development.
8 –Greater use should be made of existing information channels and mechanisms for population education and information.
9 –Governments should establish effective mechanisms for monitoring and evaluating strategies for integrating population and development.
10– Population and development policies should seek to develop the cultural values of each country.
11– Population and development policies should in each country seek to attain targets set out in the World Population Plan of Action.
12– The integration of population in development planning should be extended to subregional and district level in each country.
13– Inter-country collaboration in population and development planning should be encouraged in the spirit of the Lagos Plan of Action.
14– Countries are requested to introduce legislation on population matters which seek to protect the fundamental individual human rights and which facilitates the achievement of individual and national welfare objectives.
15– Governments are requested to enact appropriate legislation and introduce suitable programmes for protecting the wellbeing of the aged.
16– Governments should intensify technical co-operation among developing countries to enable them share expertise and experiences in population activities.

Fertility and family planning

17– Governments should take appropriate measures to protect and support the family which is the basic unit of society.
18– Countries should recognize that a substantial decline in infant and childhood mortality is a pre-requisite for fertility decline.
19– Countries should recognize the usefulness of family planning and child spacing on the stability and wellbeing of the family.
20– Countries are urged to incorporate family planning services into the maternal and child health services.
21– Special attention should be paid to educating and motivating the population at grass-roots level on the health, social and demographic aspects of family planning.

22– Wherever possible family planning education should be incorporated in training programmes for women, men and the youth.
23– Governments should ensure the availability and accessibility of family planning services to all couples or individuals seeking such services freely or at subsidized prices.
24– Family planning services should include services to sterile or subfecund couples or individuals who want to have children.
25– Governments should allocate adequate resources and appropriate training to family planning personnel to make family planning programmes more responsive to local cultural values and individual couple preferences.
26– National family planning programmes should make available a variety of methods to ensure free and conscious choice by all couples.
27– Governments should consider setting up family planning outlets which include the utilization of existing health facilities and community-based delivery systems in order to reach those communities, couples and individuals who are currently not being served by the conventional delivery systems.
28– Governments should make necessary efforts to improve planning, funding and management for more effective implementation of MCH/family planning programmes through budget and plan linkages, balancing and consolidating existing service capacity, mobilizing additional domestic and external resources, improving cost effectiveness and coordinating manpower and training strategies for existing services.
29– In view of current low mean ages at first marriage for females, national programmes, especially in education, should aim at raising the age at marriage.
30– Governments should enact legislation which protects the family and the institution of marriage.

Morbidity and mortality

31– African countries should intensify national programmes to reduce current high levels of infant, childhood, and maternal morbidity and mortality, especially for mothers and children in the rural areas.
32– Countries should review existing health delivery systems and intensify national health services systems which seek to attain the objectives of the Alma Ata Declaration and which ensure maximum community participation in the formulation, organization, delivery and evaluation of such services.
33– Countries should adopt health services systems which respond effectively to the major morbidity causal problems.
34– Countries should take appropriate and prompt action to reduce to the barest minimum the current overdependence on imported technology for the provision of health services. In this light, research in traditional medicine should be intensified.

35– Governments should consider the provision of safe drinking water and improve nutrition as a principal means of reducing current high levels of morbidity and mortality.
36– Governments should ensure equitable distribution and easy accessibility to health care delivery services to all regions of the country.
37– Health policies and programmes should be integrated in other development sectors such as education, employment and urban, rural and regional planning.
38– Countries should encourage multi-disciplinary research in mortality and morbidity and should use the results of such research in policy and programme evaluation and re-orientation.
39– Governments should promote research in infectious, parasitic and respiratory diseases which contribute so much to morbidity and mortality in countries of the region. Such research should focus among other things on the environmental and social conditions that sustain high prevalence of these diseases.

Urbanization and migration

40– Countries should seek to integrate into the overall development planning process a comprehensive urbanization policy which aims, *inter alia*, at reducing the current high migration to capital cities and other large urban centres, developing regional medium-size towns and ensuring an effective economic inter-dependence between rural communities and urban centres.
41– Countries should review their development strategies and incorporate into these strategies programmes which will stem the current flow of young people from the rural areas to the urban centres and ensure better living conditions in the rural areas. Measures should also be taken to upgrade living conditions in slum areas of cities.
42– Governments should revitalize rural economies and provide in rural areas, socio-economic services which stimulate and sustain balanced and self-reliant development, particularly for handicraft and small-scale agro-industries.
43– Governments should take appropriate measures to protect and assist international migrants and refugees and safeguard their property and respect their culture.
44– Governments should consult each other to find solutions to the refugee problem through the elimination of all forms of foreign, racial and colonial domination.
45– Governments should mount an international information campaign to alert the world on the refugee problems and mobilize additional financial resources for refugee programmes.
46– Countries affected by natural disasters such as drought and cyclones and acute problems of food shortage should assess seriously these problems and institute appropriate strategies and policies to combat them.

Changing role of women in the development process

47– Countries should recognize the role of women as mothers and workers in all sectors of the economy and provide day-care centres for mothers.
48– Governments should ensure that rural populations have easy access to modern agricultural technology and equal opportunities to use credit and other resources-generating facilities.
49– Governments should recognize the importance and changing role of women as mothers and workers in all sectors of the economy.
50– Governments should pursue more aggressively action programmes aimed at improving and protecting the legal rights and status of women.
51– Governments should introduce programmes designed to reduce the heavy burden of the rural women. Such programmes should include the introduction of labour-saving technology in agriculture, industry and domestic work.
52– Countries which have not done so should introduce programmes that will guarantee equal opportunity between the sexes in education, employment, housing and business.
53– Governments should strengthen national research institutions which study problems related to the integration of women in the process of development and enact appropriate legislation.
54– Governments should promote education for women especially and provide special population education and information programmes in the areas of fertility, mortality and high risk pregnancies.
55– Special studies should be undertaken to rid African societies of traditional practices which are detrimental to women's economic, social and cultural advancement.
56– Governments which have not so far signed and ratified the Convention on the Elimination of Discrimination against Women are urged to do so.
57– Governments should strengthen programmes designed to foster women's economic independence. Such programmes should facilitate access to credit for women especially those in rural areas.
58– Governments should take measures to improve information on women which will reflect their real contribution to economic development.

Children and youth

59– Governments should expand educational and vocational training facilities which will provide for the youth of both sexes better preparation for an economically more active life.
60– Governments should develop special programmes for the high number of school drop-outs who contribute to high unemployment

and rising delinquency and crimes in urban and rural areas. Continuing programmes for these groups should focus on practical and technical training that provide ample opportunities for gainful employment.

61– Governments should institute viable programmes to reduce infant and childhood mortality and improve the conditions of children and youth, especially in rural areas.

62– Governments are urged to celebrate International Youth Year (IYY) in order to highlight problems of youth and seek solutions for them in compliance with the planned United Nations declaration of IYY in 1985.

63– Population and family life education should be incorporated into formal and vocational training to assist young people to prepare themselves for responsible parenthood.

64– Governments are urged to introduce appropriate legislation to help improve the rights of children and thereby help to control all forms of child exploitation, neglect and abuse.

65– Programmes developed to meet the needs of the youth should take cognisance of the dominance of this group in the total population and provide adequate resources to provide opportunities to a majority of this group.

Population data collection, analysis, training and research

66– African Governments should undertake regular programmes of conducting population censuses at least once every ten years.

67– Governments are requested to give priority attention to all preparatory census activities so as to avoid problems of controversy over census results.

68– Governments should devote greater effort towards fuller and more timely analysis and interpretation of census and survey data for economic and social development planning.

69– Governments should consider as an area of priority the improvement of vital registration systems which ensure total coverage of the population in the shortest possible time. Measure should be taken to ensure timely processing and analysis of these data.

70– Governments are urged to intensify their efforts to process, analyse and utilize health statistics for planning and programme implementation.

71– Particular efforts should be made at the national level to improve the compilation, processing, analysis and utilization of statistics from the service delivery systems and other population programmes.

72– Governments should encourage, support and utilize research on population and development and should seek to strengthen national capabilities in these areas by utilizing available training facilities in the region and elsewhere for manpower development in this area.

73– Governments are invited to give sufficient financial, material and moral support to the regional and interregional demographic training institutes to enable them to carry out their duties efficiently.
74– Governments should conduct periodic training workshops in the use of demographic data on specific aspects of population for planners, policy-makers, research experts and population programme officers.
75– Governments should promote and encourage all demographic research work to reflect areas of national concern.
76– Particular efforts should be made to intensify social and action-oriented research in countries of the region.
77– Governments should ensure the integration of national experts on population in national agencies responsible for formulating, implementing and evaluating of population and development policies, programmes and projects.

Population information

78– Countries should develop appropriate mechanisms for disseminating available demographic data to researchers, policy-makers, project officers and the general public. Countries should ensure that available demographic data are summarized and presented in forms that are easily understood by all sections of the population. Countries should strive to set up population information network which provide an empirical base for project formulation, implementation and evaluation.
79– Countries should give priority attention to training experts in population information and dissemination. Population information dissemination activities should use all channels of communication available to reach a majority of the population effectively.
80– Countries should ensure adequate and prompt dissemination of the results of population research undertaken in each country.
81– Governments are urged to establish appropriate machinery for sex education and information dissemination programme.

Community involvement and role of private and non-governmental organizations

82– Governments are urged to give due recognition and support to the contribution of private and non-governmental organizations participating in population activities in their respective countries.
83– Governments should provide guidance to such bodies to ensure that the latters' activities respond to the priority problems of the community.
84– Countries should encourage greater community participation in the formulation, implementation and evaluation of population programmes.

To International Organizations

To regional and subregional organizations

85– Organizations of the United Nations system, especially UNFPA which plays an important role in supporting population programmes in Africa, as well as other international, regional and subregional organizations concerned with population questions are urged to assist governments at their request in the implementation of this African Programme of Action.

86– The Conference urges that the responsibilities of UNFPA regarding promotion, implementation and co-ordination of population programmes be strengthend further, so as to ensure a more effective and efficient delivery of population assistance in Africa.

87– The ECA Secretariat, UNFPA and other UN agencies are called upon to continue the programme of assisting African Governments in the population data collection, processing and analysis. They should also provide assistance to member States in the formulation of population policies and programmes, population information activities and the integration of population variables in development as outlined in this Programme of Action.

88– The ECA Secretariat and UNFPA should expand their services of middle-level training to African countries especially where demographic expertise is particularly lacking.

89– Regional and subregional organizations within the United Nations family should collaborate more closely with ECA in the implementation of this programme in a manner that reduces duplication of efforts.

To Donor Governments and Agencies

90– Governments and donor agencies are urged to provide more resources to UNFPA to enable it to provide increased support to national governments and to organizations of the United Nations system working in the field of population in Africa.

91– Donor governments and agencies are urged to continue to provide increased financial and technical support to African countries in their population programmes in the context of their material needs and priorities.

92– Donor governments and agencies are requested to be more flexible and timely in the allocation and management of bilateral and multilateral assistance in population.

93– Donor countries and agencies should increase their collaboration with each other in countries of the region.

RESOLUTION ADOPTED BY THE 19TH SESSION OF THE COMMISSION AND THE 10TH MEETING OF THE ECA CONFERENCE OF MINISTERS, ADDIS ABABA, 14–28 MAY 1984

506 (XIX) Kilimanjaro Programme of Action on Population and Self-Reliant Development

The Conference of Ministers

Recalling Economic and Social Council resolutions 1981/87 of 25 November 1981 and 1982/42 of 27 July 1982 on convening of an International Conference on Population in 1984, which, *inter alia*, invited the regional commissions to consider at their annual sessions in 1984, the report of the Preparatory Committee for the Conference, with a view to formulating suggestions and recommendations for the further implementation of the World Population Plan of Action at the regional level, and to transmit those suggestions and recommendations to the Conference for its consideration,

Recalling Economic and Social Council resolution 1983/6 of 26 May 1983 on the International Conference on Population, 1984, which requested the Secretary-General of the United Nations to invite all States, representatives of national liberation movements, the United Nations Council on Namibia, government, inter-governmental and non-governmental organizations to participate in the Conference,

Recalling also Economic and Social Council resolution 1983/76 of 26 July 1983 on Cross-Sectorial review of population, which decided to continue to attach high priority to population programmes and activities as contributing to the social and economic development of developing countries and urged that increased financial support for population activities be made available and that competent entities of the UN system take appropriate action accordingly in a co-ordinated manner in their respective programmes of work,

Recalling further ECA resolution 366 (XIV) of 27 March 1979 on priority population programmes of ECA, which requested the Executive Secretary to give high priority to and initiate programmes of assistance to countries on studies, analysis and institution-building activities in priority areas on population and development interrelationships, infant and childhood mortality, levels, patterns and future trends in fertility and population distribution and development,

Taking note of the report of the Preparatory Committee for the International Conference on Population (E/1984/28 and E/1984/28/Add.1),

Re-affirming its commitments to the Population programmes spelled out in the Lagos Plan of Action and reiterated in the Addis Ababa Declaration of 1983,

Noting with satisfaction efforts undertaken jointly by ECA and UNFPA to develop national expertise in the field of population,

Noting also preparatory work so far undertaken at the global and regional levels to ensure active participation by African countries at the International Conference on population scheduled to meet in Mexico in August 1984,

Taking note of the report of the Second African Population Conference held in Arusha, United Republic of Tanzania, from 9 to 13 January 1984,

1 –*Approves* the Kilimanjaro Programme of Action on Population and Self-Reliant Development adopted by the Second African Population Conference;

2 –*Requests* the States members of the Commission to ensure that their delegations to the International Conference on Population and to future United Nations Population Commission meetings use the Kilimanjaro Programme of Action as document of reference to ensure adequate consideration of the priority interests of Africa in population activities;

3 –*Further requests* the UNFPA and donor countries and agencies to increase resources given to African countries to speed up the implementation of this programme;

4 –*Directs* the Executive Secretary to take appropriate steps to ensure that the *principles and objectives* of this programme as well as the recommendations contained therein be incorporated in the Work Programme of the Commission;

5 –*Calls on* all organizations in the United Nations family, the OAU, intergovernmental, subregional, interregional and national organizations involved in population work in the region to collaborate with the Economic Commission for Africa in implementing this Programme;

6 –*Requests* the Executive Secretary to report to the Conference of Ministers at its eleventh meeting the outcome of the International Conference on Population and progress made in integrating the recommendations of that Conference and the Kilimanjaro Programme of Action for Population and Self-Reliant Development;

7 –*Requests* the Executive Secretary to report also to the next session of the Assembly of Heads of State and Government of OAU on the Kilimanjaro Programme of Action on Population.

III – MEXICO CITY DECLARATION ON POPULATION AND DEVELOPMENT*

1 – The International Conference on Population met in Mexico City from 6 to 14 August 1984, to appraise the implementation of the World Population Plan of Action, adopted by consensus at Bucharest, ten years ago. The Conference reaffirmed the full validity of the principles and objectives of the World Population Plan of Action and adopted a set of recommendations for the further implementation of the Plan in the years ahead.

Plan in the years ahead.

2 – The world has undergone far-reaching changes in the past decade. Significant progress in many fields important for human welfare has been made through national and international efforts. However, for a large number of countries it has been a period of instability, increased unemployment, mounting external indebtedness, stagnation and even decline in economic growth. The number of people living in absolute poverty has increased.

3 – Economic difficulties and problems of resource mobilization have been particularly serious in the developing countries. Growing international disparities have further exacerbated already serious problems in social and economic terms. Firm and widespread hope was expressed that increasing international co-operation will lead to a growth in welfare and wealth, their just and equitable distribution and minimal waste in use of resources, thereby promoting development and peace for the benefit of the world's population.

4 – Population growth, high mortality and morbidity, and migration problems continue to be causes of great concern requiring immediate action.

5 – The Conference confirms that the principal aim of social, economic and human development, of which population goals and policies are integral parts, is to improve the standards of living and quality of life of the people. This Declaration constitutes a solemn undertaking by the nations and international organizations gathered in Mexico City to respect national sovereignty to combat all forms of racial discrimination including *apartheid*, and to promote social and economic development, human rights and individual freedom.

6 – Since Bucharest the global population growth rate has declined from 2.03 to 1.67 per cent per year. In the next decade the growth rate will decline more slowly. Moreover, the annual increase in num-

* Adopted by the International Conference on Population, Mexico City, 14 August 1984.

bers is expected to continue and may reach 90 million by the year 2000. Ninety per cent of that increase will occur in developing countries and at that time 6.1 billion people are expected to inhabit the Earth.

7 – Demographic differences between developed and developing countries remain striking. The average life expectancy at birth, which has increased almost everywhere, is 73 years in developed countries, while in developing countries it is only 57 years and families in developing countries tend to be much larger than elsewhere. This gives cause for concern since social and population pressures may contribute to the continuation of the wide disparity in welfare and the quality of life between developing and developed countries.

8 – In the past decade, population issues have been increasingly recognized as a fundamental element in development planning. To be realistic, development policies, plans and programmes must reflect the inextricable links between population, resources, environment and development. Priority should be given to action programmes integrating all essential population and development factors, taking fully into account the need for rational utilization of natural resources and protection of the physical environment and preventing its further deterioration.

9 – The experience with population policies in recent years is encouraging. Mortality and morbidity rates have been lowered, although not to the desired extent. Family planning programmes have been successful in reducing fertility at relatively low cost. Countries which consider that their population growth rate hinders their national development plans should adopt appropriate population policies and programmes. Timely action could avoid the accentuation of problems such as overpopulation, unemployment, food shortages, and environmental degradation.

10 – Population and development policies reinforce each other when they are responsive to individual, family and community needs. Experience from the past decade demonstrates the necessity of the full participation by the entire community and grass-roots organizations in the design and implementation of policies and programmes. This will ensure that programmes are relevant to local needs and in keeping with personal and social values. It will also promote social awareness of demographic problems.

11 – Improving the status of women and enhancing their role is an important goal in itself and will also influence family life and size in a positive way. Community support is essential to bring about the full integration and participation of women into all phases and functions of the development process. Institutional, economic and cultural barriers must be removed and broad and swift action taken to assist women in attaining full equality with men in the social, political and

economic life of their communities. To achieve this goal, it is necessary for men and women to share jointly responsibilities in areas such as family life, child-caring and family planning. Governments should formulate and implement concrete policies which would enhance the status and role of women.

12– Unwanted high fertility adversely affects the health and welfare of individuals and families, especially among the poor, and seriously impedes social and economic progress in many countries. Women and children are the main victims of unregulated fertility. Too many, too close, too early and too late pregnancies are a major cause of maternal, infant and childhood mortality and morbidity.

13– Although considerable progress has been made since Bucharest, millions of people still lack access to safe and effective family planning methods. By the year 2000 some 1.6 billion women will be of childbearing age, 1.3 billion of them in developing countries. Major efforts must be made now to ensure that all couples and individuals can exercise their basic human rights to decide freely, responsibly and without coercion, the number and spacing of their children and to have the information, education and means to do so. In exercising this right, the best interests of their living and future children as well as the responsibility towards the community should be taken into account.

14– Although modern contraceptive technology has brought considerable progress into family planning programmes, increased funding is required in order to develop new methods and to improve the safety, efficacity and acceptability of existing methods. Expanded research should also be undertaken in human reproduction to solve problems of infertility and subfecundity.

15– As part of the overall goal to improve the health standards for all people, special attention should be given to maternal and child health services within a primary health care system. Through breast-feeding, adequate nutrition, clean water, immunization programmes, oral rehydration therapy and birth spacing, a virtual revolution in child survival could be achieved. The impact would be dramatic in humanitarian and fertility terms.

16– The coming decades will see rapid changes in population structures with marked regional variations. The absolute numbers of children and youth in developing countries will continue to rise so rapidly that special programmes will be necessary to respond to their needs and aspirations, including productive employment. Aging of populations is a phenomenon which many countries will experience. This issue requires attention particularly in developed countries in view of its social implications and the active contribution the aged can make to the social, cultural and economic life in their countries.

17– Rapid urbanization will continue to be a salient feature. By the end of the century, 3 billion people, 48 per cent of the world's popu-

lation, might live in cities, frequently very large cities. Integrated urban and rural development strategies should therefore be an essential part of population policies. They should be based on a full evaluation of the costs and benefits to individuals, groups and regions involved, should respect basic human rights and use incentives rather than restrictive measures.

18– The volume and nature of international migratory movements continue to undergo rapid changes. Illegal or undocumented migration and regufee movements have gained particular importance; labour migration of considerable magnitude occurs in all regions. The outflow of skills remains a serious human resource problem in many developing countries. It is indispensable to safeguard the individual and social rights of the persons involved and to protect them from exploitation and treatment not in conformity with basic human rights; it is also necessary to guide these different migration streams. To achieve this, the co-operation of countries of origin and destination and the assistance of international organizations are required.

19– As the years since 1974 have shown, the political commitment of Heads of States and other leaders and the willingness of Governments to take the lead in formulating population programmes and allocating the necessary resources are crucial for the further implementation of the World Population Plan of Action. Governments should attach high priority to the attainment of self-reliance in the management of such programmes, strengthen their administrative and managerial capabilities, and ensure co-ordination of international assistance at the national level.

20– The years since Bucharest have also shown that international co-operation in the field of population is essential for the implementation of recommendations agreed upon by the international community and can be notably successful. The need for increased resources for population activities is emphasized. Adequate and substantial international support and assistance will greatly facilitate the efforts of Governments. It should be provided wholeheartedly and in a spirit of universal solidarity and enlightened self-interest. The United Nations family should continue to perform its vital responsibilities.

21– Non-governmental organizations have a continuing important role in the implementation of the World Population Plan of Action and deserve encouragement and support from Governments and international organizations. Members of Parliament, community leaders, scientists, the media and others in influential positions are called upon to assist in all aspects of population and development work.

22– At Bucharest, the world was made aware of the gravity and magnitude of the population problems and their close interrelationships with economic and social development. The message of Mexico

City is to forge ahead with effective implementation of the World Population Plan of Action aimed at improving standards of living and quality of life for all peoples of this planet in promotion of their common destiny in peace and security.

23– *In issuing this Declaration, all participants at the International Conference on Population reiterate their commitment and rededicate themselves to the further implementation of the plan.*

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